

State of New Mexico



W.R. HUMPHRIES
COMMISSIONER



SLO REF. NO. OG-351

Commissioner of Public Lands

P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

August 18, 1987

Northwest Pipeline Corp.
Attention: Darrell L. Gillen
P. O. Box 8900
Salt Lake City, Utah 84108-0900

Re: Rosa Unit
1987 Plan of Development
Rio Arriba County, New Mexico

Gentlemen:

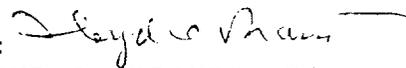
The Commissioner of Public Lands has this date approved the above captioned Plan of Development. Our approval is subject to like approval by all appropriate agencies.

In future Plan of Developments, please submit a plat of the unit area.

If we may be of further help, please do not hesitate to call on us.

Very truly yours,

W. R. HUMPHRIES
COMMISSIONER OF PUBLIC LANDS

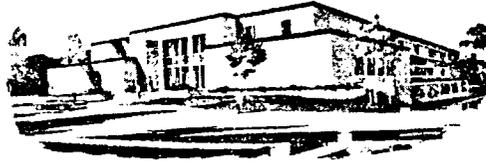
BY: 
FLOYD O. PRANDO, Director
Oil & Gas Division
(505) 827-5744

WRH/FOP/ams
enclosure
cc: Bureau of Land Management
Oil Conservation Division

State of New Mexico



W.R. HUMPHRIES
COMMISSIONER



Commissioner of Public Lands

SLO REF NO. OG-329

P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

August 13, 1987

Northwest Pipeline Corporation
ATTENTION: Mr. Darrell L. Gillen
P. O. Box 8900
Salt Lake City, Utah 84108-0900

Re: Rosa Unit
San Juan & Rio Arriba County,
New Mexico

This office has received your letter of June 16, 1987, together with revised schedules for the approved 11th, 12th, 13th, and 14th Expanded Participating Areas for the above captioned unit.

These revisions have this date been accepted and filed in our unit file.

If we may be of further help please do not hesitate to call on us.

Very truly yours,

W. R. HUMPHRIES
COMMISSIONER OF PUBLIC LANDS

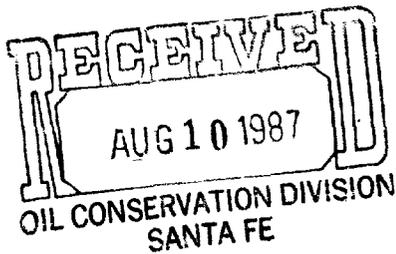
BY: *Floyd O. Prado*
FLOYD O. PRANDO, Director,
Oil and Gas Division
(505) 827-5744

WRH/FOP/pm
encls.

cc: OCD-Santa Fe, New Mexico
BLM-Albuquerque, New Mexico Attn: Mr. Robert Kent
OGAD-Santa Fe, New Mexico

JUL 15 1987

Rosa Unit
0160 (015)



Northwest Pipeline Corporation
ATTN: Mr. Darrell L. Gillen
P.O. Box 8900
Salt Lake City, Utah 84108-0900

Gentlemen:

Revisions to the schedules of the approved 11, 12, 13, and 14 expanded Mesaverde participating area of the Rosa Unit were received in this office on June 27, 1987. The revisions to the schedules are accepted for record purposes.

If you have any questions, please contact Gail Keller at the above address or telephone 505/761-4503.

Sincerely,

A handwritten signature in dark ink, appearing to read "Ed Vignobelli". The signature is written in a cursive style and is positioned above the typed name.

Assistant District Manager
Mineral Resources

Enclosure

cc:

HM-016 w/enci

/Comm. of Public Lands

NRICD

015:GKeller:jms:7-9-87:3286M

Bureau of Land Management
Minerals Division
435 Montano NE
Albuquerque, NM 87107

MAY 18 1987

Rosa Unit (POD)
3180 (015)

Northwest Pipeline Corporation
ATTN: Darrell L. Gillen
P.O. Box 8900
Salt Lake City, UT 84108-0900

Gentlemen:

One approved copy of your 1987 Plan of Development for the Rosa Unit area, San Juan and Rio Arriba Counties, New Mexico is enclosed. Such plan, proposing no development drilling during 1987, is approved this date subject to like approval by the appropriate officials of the State of New Mexico.

If you have any questions, please contact Robert Kent at the above address or telephone (505) 761-4503.

Sincerely,

(Orig. Signed) - Sid Vogelpohl

Assistant District Manager
Mineral Resources

Enclosure

cc:
NM-016
✓HMOCD
Comm. of Pub. Lands
015:RKent:klm:5-16-87:3080M

NORTHWEST PIPELINE CORPORATION 
ONE OF THE WILLIAMS COMPANIES

LAND DEPARTMENT

P.O. BOX 8900
SALT LAKE CITY, UTAH 84118-0900
801 584 6661
801 584 7215

265-87

June 16, 1987

Assistant District Manager, Minerals
Bureau of Land Management
425 Montano, N.E.
Albuquerque, NM 87107

State of New Mexico
Commissioner of Public Lands
ATTN: Floyd O. Prando
P.O. Box 1148
Santa Fe, NM 87501

State of New Mexico
Oil Conservation Commission
ATTN: William J. LeMay ✓
P.O. Box 2088
Santa Fe, NM 87501

RE: Rosa Unit I Sec. 587
San Juan & Rio Arriba County, New Mexico

APPROVAL OF THE ELEVENTH EXPANDED PARTICIPATING AREA
Mesaverde Formation
Effective April 1, 1981

APPROVAL OF THE TWELFTH EXPANDED PARTICIPATING AREA
Mesaverde Formation
Effective June 1, 1981

APPROVAL OF THE THIRTEENTH EXPANDED PARTICIPATING AREA
Mesaverde Formation
Effective October 1, 1981

APPROVAL OF THE FOURTEENTH EXPANDED PARTICIPATING AREA
Mesaverde Formation
Effective December 1, 1981

Gentlemen:

The referenced Approvals for the 11th, 12th, 13th and 14th Expanded Participating Areas which were filed April 18, 1985, have been approved by the Bureau of Land Management on August 27, 1986, Commissioner of Public Lands on September 10, 1986, and the Oil Conservation Division on May 13, 1985.

June 16, 1987
Page Two

Attached are Schedules XII, XIII, XIV, and XV showing the approved Mesaverde Participating Areas. The percentage of ownership in these schedules have been updated in those tracts that NWP transferred a portion of their interest to Coastal since the original filing of April 18, 1985. These schedules describe the Participating Areas and the percentage of unitized substances allocated to each unitized tract.

Also, the following changes in the proposed April 18, 1985 schedules have been made and are reflected in these schedules accordingly.

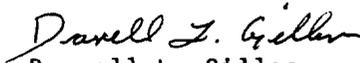
The W/2NW/4 of Sec. 22, T-31-N, R-6-W (71.59 acres) was originally included in Tract 39 and is now included in Tract 43.

In the 14th Expansion, page 5, the ownership of Tract 32 was shown as Northwest Pipeline Corporation and has been corrected to show T. H. McElvain, et al., as the owner. On page 8, Tract 45, same Expansion, the Township and Range was mistakenly shown as T-31-N, R-6-W and is corrected to show T-32-N, R-6-W.

Copies of this letter and schedules are being sent to the working interest owners shown on the attached sheet.

Sincerely,

NORTHWEST PIPELINE CORPORATION


Darrell L. Gillen
Land/NGPA Supervisor

DLG/sp
Attachments

cc: W. O. Curtis
M. H. Johnson
W. S. West
L. G. Loving
C. Potter
L. G. Eaton

ROSA UNIT MESAVERDE
WORKING INTEREST OWNERS

El Paso Natural Gas Company
P. O. Box 1492
El Paso, TX 79978
Attn: Brian Broaddus

Winifred K. Ponder
c/o Texas Commerce Bank of El Paso
Attn: Dessalyn R. Murray (Trust #5-71568)
P. O. Drawer 140
El Paso, TX 79980

Ms. Lois J. Willard
P. O. Box 5205
Santa Fe, NM 87501

John Brennan
Estate of J. R. Brennan
4476 Meadowlark Lane
Santa Barbara, CA 93105

Coastal Oil & Gas Corporation
Attn: Mr. John F. Kennedy
P. O. Box 749
600 - 17th Street, Suite 800 S.
Denver, CO 80201

Amoco Production Company
Western Division, Production Manager
1670 Broadway
Denver, CO 80202

Meridian Oil
Land Department
P. O. Box 4289
Farmington, NM 87499

SCHEDULE XII
ELEVENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 13</u>						
SF-078763	<u>T-31-N, R-5-W</u> Sec. 5: All Sec. 8: NE/4	527.96	Royalty Working Interest Northwest Pipeline Corp. Coastal Oil & Gas Corp. ORRI Total	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	 2.39848% .88712%
	<u>T-31-N, R-5-W</u> Sec. 8: S/2	320.00	Royalty Working Interest Northwest Pipeline Amoco Coastal Oil & Gas Corp. ORRI Total	12.50000% 20.12500% 43.75000% 23.62500% 00.00000% <u>100.00000%</u>	12.50000% 20.12500% 43.75000% 23.62500% 00.00000% <u>100.00000%</u>	 .45802% .99572% .53768%
<u>TRACT 14</u>						
SF-078767	<u>T-31-N, R-5-W</u> Sec. 6: All Sec. 7: All Sec. 8: NW/4 <u>T-31-N, R-6-W</u> Sec. 12: All Sec. 13: Lots 1,2,3,4, W/2, W/2E/2 (A11) Sec. 24: Lots 1,2,3,4, W/2, W/2E/2 (A11)	2518.04	Royalty Working Interest Northwest Pipeline Corp. Coastal Oil & Gas Corp. ORRI Total	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	 11.43928% 4.23097%

Effective April 1, 1981

SCHEDULE XII
ELEVENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 18</u>						
SF-078764	<u>T-31-N, R-5-W</u> Sec. 18: All Sec. 19: E/2E/2, NW/4NE/4, SW/4SE/4, Lots 1, 4 Sec. 20: SE/4 Sec. 29: N/2NE/4, SW/4, W/2SE/4 Sec. 30: E/2, Lots 1,2,3,4 (All) Sec. 31: E/2, Lots 1,2,3,4 (All)	2187.30	Royalty Working Interest Northwest Pipeline Corp. Coastal Oil & Gas Corp. ORRI Total	12.500000% 63.875000% 23.625000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 63.875000% 23.625000% <u>00.000000%</u> <u>100.000000%</u>	 9.93675% 3.67523%
<u>TRACT 19</u>						
Fee	<u>T-31-N, R-5-W</u> Sec. 19: Lots 2, 3, SW/4NE/4, NW/4SE/4	152.22	Royalty Working Interest Northwest Pipeline Corp. Coastal Oil & Gas Corp. ORRI Total	12.500000% 63.875000% 23.625000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 63.875000% 23.625000% <u>00.000000%</u> <u>100.000000%</u>	 .69152% .25577%
<u>TRACT 20</u>						
Fee	<u>T-31-N, R-5-W</u> Sec. 20: SW/4 Sec. 29: NW/4	320.00	Royalty Working Interest Northwest Pipeline Corp. Coastal Oil & Gas Corp. ORRI Total	12.500000% 63.875000% 23.625000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 63.875000% 23.625000% <u>00.000000%</u> <u>100.000000%</u>	 1.45374% .53769%

SCHEDULE XII
ELEVENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 21</u>						
SF-079165	T-31-N, R-5-W Sec. 29: S/2NE/4, E/2SE/4	160.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	.72687%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.26884%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 25</u>						
E-347-33	T-31-N, R-5-W Sec. 32: NW/4	160.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			El Paso Natural Gas Co.	52.499848%	52.499848%	.59741%
			Winnifred Ponder	17.500032%	17.500032%	.19914%
			John Brennand	8.750060%	8.750060%	.09958%
			Lois J. Willard	8.750060%	8.750060%	.09958%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 26</u>						
E-347-28	T-31-N, R-5-W Sec. 32: NE/4	160.00	Royalty	12.500000%	12.500000%	.99571%
			Working Interest			
			Northwest Pipeline	87.500000%	87.500000%	
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 27</u>						
E-347-32	T-31-N, R-5-W Sec. 32: S/2	320.00	Royalty	12.500000%	12.500000%	1.99142%
			Working Interest			
			El Paso Natural Gas Co.	65.625000%	65.625000%	
			ORRI	21.875000%	21.875000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XII
ELEVENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 29</u>						
SF-078772	<u>T-31-N, R-6-W</u>	1161.86	Royalty	12.500000%	12.500000%	
	Sec. 1: All		Working Interest			
	Sec. 3: Lots 5, 6, 7, 8, 9, SE/4, E/2SW/4, SW/4SW/4		Northwest Pipeline Corp.	63.875000%	63.875000%	5.27825%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	1.95223%
			ORRI	00.000000%	00.000000%	
	Sec. 4: Lots 5, 6, 7, 8, 9, N/2SW/4, NW/4SE/4, SE/4SE/4		Total	<u>100.000000%</u>	<u>100.000000%</u>	
	<u>T-32-N, R-6-W</u>					
	Sec. 33: W/2					
<u>TRACT 30</u>						
E-289-37	<u>T-31-N, R-6-W</u>	346.91	Royalty	12.500000%	12.500000%	
	Sec. 2: Lots 6, 7, 8, S/2		Working Interest			
			Northwest Pipeline Corp.	62.050000%	62.050000%	1.57599%
			Coastal Oil & Gas Corp.	22.950000%	22.950000%	.58290%
			ORRI	2.500000%	2.500000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 31</u>						
Unknown	<u>T-31-N, R-6-W</u>	9.35	Royalty	12.500000%	00.000000%	0.00000%
	Sec. 2: Lot 5		Working Interest			
			L. A. Smith	87.500000%	00.000000%	
			ORRI	2.500000%	00.000000%	
			Total	<u>100.000000%</u>	<u>00.000000%</u>	

SCHEDULE XII
ELEVENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 32</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 3 & 4 a portion thereof designated as Tract 37	38.12	Royalty Working Interest T. H. McElvain, et al ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	00.000000% 00.000000% 00.000000% <u>00.000000%</u>	0.00000%
<u>TRACT 33</u>						
SF-078765	<u>T-31-N, R-6-W</u> Sec. 4: S/2SW/4, SW/4SE/4 Sec. 5: All Sec. 8: NW/4, E/2NE/4 Sec. 9: All Sec. 10: Lots 1,2,3, E/2E/2, NW/4 Sec. 15: Lots 1,2, E/2SW/4, E/2	2220.23	Royalty Working Interest Northwest Pipeline Corp. Coastal Oil & Gas Corp. ORRI Total	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	10.08635% 3.73056%
<u>TRACT 34</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 8: W/2NE/4	80.00	Royalty Working Interest Northwest Pipeline Corp. Coastal Oil & Gas Corp. ORRI Total	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	.36343% .13443%

SCHEDULE XII
ELEVENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 35</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 10: W/2E/2	160.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	.72687%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.26884%
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 36</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 10: Tract 38 Sec. 15: Tract 38	161.52	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	59.882813%	59.882813%	.73377%
			Coastal Oil & Gas Corp.	22.148437%	22.148437%	.27140%
			ORRI	<u>5.468750%</u>	<u>5.468750%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 37</u>						
SF-078771	<u>T-31-N, R-6-W</u> Sec. 11: All Sec. 14: All Sec. 23: All Sec. 26: All	2560.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	11.62990%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	4.30148%
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 38</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 15: Tract 39	80.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	.36343%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.13443%
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XII
ELEVENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 39</u>						
SF-078766	<u>T-31-N, R-6-W</u> Sec. 22: E/2 Sec. 25: W/2, W/2E/2, Lots 1, 2,3,4 (A11)	864.48	Royalty Working Interest Northwest Pipeline Corp. Coastal Oil & Gas Corp. ORRI Total	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	 3.92727% 1.45255%
	<u>T-31-N, R-6-W</u> Sec. 22: Lot 1, SW/4, E/2NW/4	248.41	Royalty Working Interest Northwest Pipeline Amoco Coastal Oil & Gas Corp. ORRI Total	12.500000% 20.125000% 43.750000% 23.625000% 00.000000% <u>100.000000%</u>	12.500000% 20.125000% 43.750000% 23.625000% 00.000000% <u>100.000000%</u>	 .35556% .77295% .41739%
<u>TRACT 43</u>						
E-289-43	<u>T-31-N, R-6-W</u> Sec. 15: 8.41 Ac. out of S/2S/2SW/4SW/4 Sec. 22: W/2NW/4	80.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	.49786%
<u>TRACT 44</u>						
E-504-11	<u>T-32-N, R-6-W</u> Sec. 32: W/2	320.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 84.500000% 3.000000% <u>100.000000%</u>	12.500000% 84.500000% 3.000000% <u>100.000000%</u>	1.99141%

SCHEDULE XII
ELEVENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 45</u>						
E-504-13	<u>T-32-N, R-6-W</u> Sec. 32: E/2	320.00	Royalty	12.500000%	12.500000%	1.99141%
			Working Interest			
			El Paso Natural Gas Co.	65.625000%	65.625000%	
			ORRI	21.875000%	21.875000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 47</u>						
E-346-19	<u>T-32-N, R-6-W</u> Sec. 36: W/2	320.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	1.45374%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.53767%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 48</u>						
E-346-24	<u>T-32-N, R-6-W</u> Sec. 36: E/2	320.00	Royalty	12.500000%	12.500000%	1.99141%
			Working Interest			
			El Paso Natural Gas Co.	65.625000%	65.625000%	
			ORRI	21.875000%	21.875000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XII
ELEVENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

RECAPITULATION

Description of Lands in Participating Area

Township 31 North, Range 5 West, N.M.P.M.

Sec. 20: S/2

Sec. 5,6,7,8,18,19,29,30,31,32: All

Township 31 North, Range 6 West, N.M.P.M.

Sec. 8: N/2

Sec. 1,*2,*3,*4,5,9,10,11,12,13,14,15,22,23,24,25,26: All

Township 32 North, Range 6 West, N.M.P.M.

Sec. 33: W/2

Sec. 32,36: All

Total Number of Acres in Participating Area 16,116.40

Total Number of Committed Acres in Participating Area 16,068.93

*Portion of this acreage not committed to unit.

SCHEDULE XIII
TWELFTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 13</u>						
SF-078763	<u>T-31-N, R-5-W</u> Sec. 5: All Sec. 8 NE/4	527.96	Royalty Working Interest Northwest Pipeline Corp. Coastal Oil & Gas Corp. ORRI Total	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	 2.35165% .86979%
	<u>T-31-N, R-5-W</u> Sec. 8: S/2	320.00	Royalty Working Interest Northwest Pipeline Amoco Coastal Oil & Gas Corp. ORRI Total	12.50000% 20.12500% 43.75000% 23.62500% 00.00000% <u>100.00000%</u>	12.50000% 20.12500% 43.75000% 23.62500% 00.00000% <u>100.00000%</u>	 .44908% .97627% .52718%
<u>TRACT 14</u>						
SF-078767	<u>T-31-N, R-5-W</u> Sec. 6: All Sec. 7: All Sec. 8: NW/4 <u>T-31-N, R-6-W</u> Sec. 12: All Sec. 13: Lots 1,2, 3,4, W/2, W/2E/2 Sec. 24: Lots 1,2, 3,4, W/2, W/2E/2	2518.04	Royalty Working Interest Northwest Pipeline Corp. Coastal Oil & Gas Corp. ORRI Total	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	 11.21592% 4.14835%

Effective June 1, 1981

SCHEDULE XIII
 TWELFTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
 ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 18</u>						
SF-078764	<u>T-31-N, R-5-W</u>	2187.30	Royalty	12.500000%	12.500000%	
	Sec. 18: All		Working Interest			
	Sec. 19: E/2E/2, NW/4NE/4, SW/4SE/4		Northwest Pipeline Corp.	63.875000%	63.875000%	9.74273%
	Lots 1,4		Coastal Oil & Gas Corp.	23.625000%	23.625000%	3.60347%
	Sec. 20: SE/4		ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
	Sec. 29: N/2NE/4, SW/4, W/2SE/4		Total	<u>100.000000%</u>	<u>100.000000%</u>	
	Sec. 30: E/2, Lots 1,2,3,4 (All)					
	Sec. 31: Lots 1,2, 3,4, E/2 (All)					
<u>TRACT 19</u>						
Fee	<u>T-31-N, R-5-W</u>	152.22	Royalty	12.500000%	12.500000%	
	Sec. 19: Lots 2, 3, SW/4NE/4, NW/4SE/4		Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	.67802%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.25078%
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 20</u>						
Fee	<u>T-31-N, R-5-W</u>	320.00	Royalty	12.500000%	12.500000%	
	Sec. 20: SW/4		Working Interest			
	Sec. 29: NW/4		Northwest Pipeline Corp.	63.875000%	63.875000%	1.42535%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.52719%
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XIII
TWELFTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 21</u>						
SF-079165	<u>T-31-N, R-5-W</u> Sec. 29: S/2NE/4, E/2SE/4	160.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	.71268%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.26359%
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 25</u>						
E-347-33	<u>T-31-N, R-5-W</u> Sec. 32: NW/4	160.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			El Paso Natural Gas Co.	52.499848%	52.499848%	.58576%
			Winnifred Ponder	17.500032%	17.500032%	.19525%
			John Brennand	8.750060%	8.750060%	.09763%
			Lois J. Willard	8.750060%	8.750060%	.09763%
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 26</u>						
E-347-28	<u>T-31-N, R-5-W</u> Sec. 32: NE/4	160.00	Royalty	12.500000%	12.500000%	.97627%
			Working Interest			
			Northwest Pipeline Corp.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XIII
 TWELFTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
 ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 27</u>						
E-347-32	<u>T-31-N, R-5-W</u> Sec. 32: S/2	320.00	Royalty	12.500000%	12.500000%	1.95254%
			Working Interest			
			El Paso Natural Gas Co.	65.625000%	65.625000%	
			ORRI	21.875000%	21.875000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 28</u>						
SF-078773	<u>T-31-N, R-5-W</u> Sec. 33: S/2	320.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	20.125000%	20.125000%	.44909%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.52718%
			Amoco	43.750000%	43.750000%	.97627%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 29</u>						
SF-078772	<u>T-31-N, R-6-W</u> Sec. 1: All Sec. 3: Lots 5, 6,7,8,9, SE/4, E/2SW/4, SW/4SW/4 Sec. 4: Lots 5,6, 7,8,9, N/2SW/4, NW/4SE/4, SE/4SE/4 <u>T-32-N, R-6-W</u> Sec. 33: W/2	1161.86	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Co.	63.875000%	63.875000%	5.17519%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	1.91411%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XIII
TWELFTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 30</u>						
E-289-37	<u>T-31-N, R-6-W</u> Sec. 2: Lots 6, 7,8, S/2	346.91	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	62.050000%	62.050000%	1.54522%
			Coastal Oil & Gas Corp.	22.950000%	22.950000%	.57151%
			ORRI	<u>2.500000%</u>	<u>2.500000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 31</u>						
Unknown	<u>T-31-N, R-6-W</u> Sec. 2: Lot 5	9.35	Royalty	12.500000%	00.000000%	0.00000%
			Working Interest			
			L. A. Smith	87.500000%	00.000000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>00.000000%</u>	
<u>TRACT 32</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 3 & 4 a portion thereof designated as Tract 37	38.12	Royalty	12.500000%	00.000000%	0.00000%
			Working Interest			
			T. H. McElvain, et al	87.500000%	00.000000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 33</u>						
SF-078765	<u>T-31-N, R-6-W</u> Sec. 4: S/2SW/4, SW/4SE/4 Sec. 5: All Sec. 8: NW/4, E/2NE/4 Sec. 9: All Sec. 10: Lots 1, 2,3, E/2E/2, NW/4 Sec. 15: Lots 1,2, E/2SW/4, E/2	2220.23	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Co.	63.875000%	63.875000%	9.88941%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	3.65772%
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XIII
 TWELFTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
 ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 34</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 8: W/2NE/4	80.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	.35634%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.13179%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 35</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 10: W/2E/2	160.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	.71268%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.26359%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 36</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 10: Tract 38 Sec. 15: Tract 38	161.52	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	59.882813%	59.882813%	.71945%
			Coastal Oil & Gas Corp.	22.148437%	22.148437%	.26609%
			ORRI	5.468750%	5.468750%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 37</u>						
SF-078771	<u>T-31-N, R-6-W</u> Sec. 11: All Sec. 14: All Sec. 23: All Sec. 26: All	2560.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	11.40282%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	4.21748%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XIII
TWELFTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 38</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 15: Tract 39	80.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	.35634%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.13179%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 39</u>						
SF-078766	<u>T-31-N, R-6-W</u> Sec. 22: E/2 Sec. 25: W/2, W/2E/2, Lots 1, 2,3,4 (All)	864.48	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	3.85059%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	1.42419%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
	<u>T-31-N, R-6-W</u> Sec. 22: Lot 1, SW/4, E/2NW/4	248.41	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline	20.125000%	20.125000%	.34862%
			Amoco	43.750000%	43.750000%	.75787%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.40924%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 43</u>						
E-289-43	<u>T-31-N, R-6-W</u> Sec. 15: 8.41 Ac. out of S/2S/2SW/4SW/4 Sec. 22: W/2NW/4	80.00	Royalty	12.500000%	12.500000%	.48813%
			Working Interest			
			Northwest Pipeline Corp.	82.500000%	82.500000%	
			ORRI	5.000000%	5.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XIII
TWELFTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 44</u>						
E-504-11	<u>T-32-N, R-6-W</u> Sec. 32: W/2	320.00	Royalty	12.500000%	12.500000%	1.95254%
			Working Interest			
			Northwest Pipeline Corp.	84.500000%	84.500000%	
			ORRI	3.000000%	3.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 45</u>						
E-504-13	<u>T-32-N, R-6-W</u> Sec. 32: E/2	320.00	Royalty	12.500000%	12.500000%	1.95254%
			Working Interest			
			El Paso Natural Gas Co.	65.625000%	65.625000%	
			ORRI	21.875000%	21.875000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 47</u>						
E-346-19	<u>T-32-N, R-6-W</u> Sec. 36: W/2	320.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	1.42535%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.52719%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 48</u>						
E-346-24	<u>T-32-N, R-6-W</u> Sec. 36: E/2	320.00	Royalty	12.500000%	12.500000%	1.95254%
			Working Interest			
			El Paso Natural Gas Co.	65.625000%	65.625000%	
			ORRI	21.875000%	21.875000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XIII
TWELFTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

RECAPITULATION

Description of Lands in Participating Area

Township 31 North, Range 5 West, N.M.P.M.

Sec. 20,33: S/2

Sec. 5,6,7,8,18,19,29,30,31,32: All

Township 31 North, Range 6 West, N.M.P.M.

Sec. 8: N/2

Sec. 1,*2,*3,*4,5,9,10,11,12,13,14,15,22,23,24,25,26: All

Township 32 North, Range 6 West, N.M.P.M.

Sec. 33: W/2

Sec. 32,36: All

Total Number of Acres in Participating Area 16,436.40

Total Number of Committed Acres in Participating Area 16,388.93

*Portion of this acreage not committed to unit.

SCHEDULE XIV
THIRTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE DAKOTA FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 13</u>						
SF-078763	T-31-N, R-5-W Sec. 5: All Sec. 8 NE/4	527.96	Royalty Working Interest Northwest Pipeline Corp. Coastal Oil & Gas Corp. ORRI Total	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	 2.18624% .80862%
	T-31-N, R-5-W Sec. 8: S/2	320.00	Royalty Working Interest Northwest Pipeline Amoco Coastal Oil & Gas Corp. ORRI Total	12.50000% 20.12500% 43.75000% 23.62500% 00.00000% <u>100.00000%</u>	12.50000% 20.12500% 43.75000% 23.62500% 00.00000% <u>100.00000%</u>	 .41749% .90760% .49010%
<u>TRACT 14</u>						
SF-078767	T-31-N, R-5-W Sec. 6: All Sec. 7: All Sec. 8: NW/4 T-31-N, R-6-W Sec. 12: All Sec. 13: Lots 1,2, 3,4, W/2, W/2E/2 Sec. 24: Lots 1,2, 3,4, W/2, W/2E/2	2518.04	Royalty Working Interest Northwest Pipeline Corp. Coastal Oil & Gas Corp. ORRI Total	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	 10.42700% 3.85656%

Effective October 1, 1981

SCHEDULE XIV
 THIRTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
 ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 18</u>						
SF-078764	T-31-N, R-5-W	2187.30	Royalty	12.500000%	12.500000%	
	Sec. 18: All		Working Interest			
	Sec. 19: E/2E/2, NW/4NE/4, SW/4SE/4		Northwest Pipeline Corp.	63.875000%	63.875000%	9.05744%
	Lots 1,4		Coastal Oil & Gas Corp.	23.625000%	23.625000%	3.35001%
	Sec. 20: SE/4		ORRI	00.000000%	00.000000%	
	Sec. 29: N/2NE/4, SW/4, W/2SE/4		Total	<u>100.000000%</u>	<u>100.000000%</u>	
	Sec. 30: E/2, Lots 1,2,3,4 (A11)					
	Sec. 31: Lots 1,2, 3,4, E/2 (A11)					
<u>TRACT 19</u>						
Fee	T-31-N, R-5-W	152.22	Royalty	12.500000%	12.500000%	
	Sec. 19: Lots 2, 3, SW/4NE/4, NW/4SE/4		Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	.63033%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.23314%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 20</u>						
Fee	T-31-N, R-5-W	320.00	Royalty	12.500000%	12.500000%	
	Sec. 20: SW/4		Working Interest			
	Sec. 29: NW/4		Northwest Pipeline Corp.	63.875000%	63.875000%	1.32508%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.49010%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XIV
 THIRTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
 ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 21</u>						
SF-079165	<u>T-31-N, R-5-W</u> Sec. 29: S/2NE/4, E/2SE/4	160.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	.66255%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.24505%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 25</u>						
E-347-33	<u>T-31-N, R-5-W</u> Sec. 32: NW/4	160.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			El Paso Natural Gas Co.	52.499848%	52.499848%	.54456%
			Winnifred Ponder	17.500032%	17.500032%	.18152%
			John Brennand	8.750060%	8.750060%	.09076%
			Lois J. Willard	8.750060%	8.750060%	.09076%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 26</u>						
E-347-28	<u>T-31-N, R-5-W</u> Sec. 32: NE/4	160.00	Royalty	12.500000%	12.500000%	.90760%
			Working Interest			
			Northwest Pipeline Corp.	87.500000%	87.500000%	
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 27</u>						
E-347-32	<u>T-31-N, R-5-W</u> Sec. 32: S/2	320.00	Royalty	12.500000%	12.500000%	1.81520%
			Working Interest			
			El Paso Natural Gas Co.	65.625000%	65.625000%	
			ORRI	21.875000%	21.875000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XIV
THIRTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 28</u>						
SF-078773	<u>T-31-N, R-5-W</u> Sec. 33: S/2	320.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	20.125000%	20.125000%	.41750%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.49010%
			Amoco	43.750000%	43.750000%	.90760%
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 29</u>						
SF-078772	<u>T-31-N, R-6-W</u> Sec. 1: All Sec. 3: Lots 5, 6,7,8,9, SE/4, E/2SW/4, SW/4SW/4 Sec. 4: Lots 5,6, 7,8,9, N/2SW/4, NW/4SE/4, SE/4SE/4 <u>T-32-N, R-6-W</u> Sec. 33: W/2	1161.86	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Co.	63.875000%	63.875000%	4.81117%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	1.77947%
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
	<u>T-32-N, R-6-W</u> Sec. 34: E/2, E/2 W/2, SW/4SW/4 Sec. 35: All	1160.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	20.125000%	20.125000%	1.51342%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	1.77663%
			Amoco	43.750000%	43.750000%	3.29005%
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 30</u>						
E-289-37	<u>T-31-N, R-6-W</u> Sec. 2: Lots 6, 7,8, S/2	346.91	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	62.050000%	62.050000%	1.43653%
			Coastal Oil & Gas Corp.	22.950000%	22.950000%	.53131%
			ORRI	<u>2.500000%</u>	<u>2.500000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XIV
THIRTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 31</u>						
Unknown	<u>T-31-N, R-6-W</u> Sec. 2: Lot 5	9.35	Royalty	12.500000%	00.000000%	0.00000%
			Working Interest			
			L. A. Smith	87.500000%	00.000000%	
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>00.000000%</u>	
<u>TRACT 32</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 3 & 4 a portion thereof designated as Tract 37	38.12	Royalty	12.500000%	00.000000%	
			Working Interest			
			T. H. McElvain, et al	87.500000%	00.000000%	0.00000%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>00.000000%</u>	
Fee	<u>T-32-N, R-6-W</u> Sec. 34: NW/4SW/4	40.00	Royalty	12.500000%	00.000000%	0.00000%
			Working Interest			
			T. H. McElvain, et al	87.500000%	00.000000%	
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>00.000000%</u>	
<u>TRACT 33</u>						
SF-078765	<u>T-31-N, R-6-W</u> Sec. 4: S/2SW/4, SW/4SE/4 Sec. 5: All Sec. 8: NW/4, E/2NE/4 Sec. 9: All Sec. 10: Lots 1, 2,3, E/2E/2, NW/4 Sec. 15: Lots 1,2, E/2SW/4, E/2	2220.23	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Co.	63.875000%	63.875000%	9.19380%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	3.40044%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XIV
THIRTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 34</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 8: W/2NE/4	80.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	.33127%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.12253%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 35</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 10: W/2E/2	160.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	.66255%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.24505%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 36</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 10: Tract 38 Sec. 15: Tract 38	161.52	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	59.882813%	59.882813%	.66884%
			Coastal Oil & Gas Corp.	22.148437%	22.148437%	.24738%
			ORRI	5.468750%	5.468750%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 37</u>						
SF-078771	<u>T-31-N, R-6-W</u> Sec. 11: All Sec. 14: All Sec. 23: All Sec. 26: All	2560.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	10.60076%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	3.92082%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XIV
THIRTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 38</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 15: Tract 39	80.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	.33127%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.12253%
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 39</u>						
SF-078766	<u>T-31-N, R-6-W</u> Sec. 22: E/2 Sec. 25: W/2, W/2E/2, Lots 1, 2,3,4 (A11)	864.48	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	3.57974%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	1.32401%
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
	<u>T-31-N, R-6-W</u> Sec. 22: Lot 1, SW/4, E/2NW/4	248.41	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline	20.125000%	20.125000%	.32409%
			Amoco	43.750000%	43.750000%	.70456%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.38047%
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 43</u>						
E-289-43	<u>T-31-N, R-6-W</u> Sec. 15: 8.41 Ac. out of S/2S/2SW/4SW/4 Sec. 22: W/2NW/4	80.00	Royalty	12.500000%	12.500000%	.45380%
			Working Interest			
			Northwest Pipeline Corp.	82.500000%	82.500000%	
			ORRI	<u>5.000000%</u>	<u>5.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 44</u>						
E-504-11	<u>T-32-N, R-6-W</u> Sec. 32: W/2	320.00	Royalty	12.500000%	12.500000%	1.81520%
			Working Interest			
			Northwest Pipeline Corp.	84.500000%	84.500000%	
			ORRI	<u>3.000000%</u>	<u>3.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XIV
THIRTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 45</u>						
E-504-13	<u>T-32-N, R-6-W</u> Sec. 32: E/2	320.00	Royalty	12.500000%	12.500000%	1.81520%
			Working Interest			
			El Paso Natural Gas Co.	65.625000%	65.625000%	
			ORRI	21.875000%	21.875000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 46</u>						
Fee	<u>T-32-N, R-6-W</u> Sec. 34: W/2NW/4	80.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	20.125000%	20.125000%	.10437%
			Coastal Oil & Gas Corp.	23.125000%	23.125000%	.12253%
			Amoco	43.750000%	43.750000%	.22690%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 47</u>						
E-346-19	<u>T-32-N, R-6-W</u> Sec. 36: W/2	320.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	1.32509%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.49011%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 48</u>						
E-346-24	<u>T-32-N, R-6-W</u> Sec. 36: E/2	320.00	Royalty	12.500000%	12.500000%	1.81520%
			Working Interest			
			El Paso Natural Gas Co.	65.625000%	65.625000%	
			ORRI	21.875000%	21.875000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XIV
THIRTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

RECAPITULATION

Description of Lands in Participating Area

Township 31 North, Range 5 West, N.M.P.M.

Sec. 20, 33: S/2

Sec. 5,6,7,8,18,19,29,30,31,32: All

Township 31 North, Range 6 West, N.M.P.M.

Sec. 8: N/2

Sec. 1,*2,*3,*4,5,9,10,11,12,13,14,15,22,23,24,25,26: All

Township 32 North, Range 6 West, N.M.P.M.

Sec. 33: W/2

Sec. 32,*34,35,36: All

Total Number of Acres in Participating Area 17,716.40

Total Number of Committed Acres in Participating Area 17,628.93

*Portion of this acreage not committed to unit.

SCHEDULE XV
FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 13</u>						
SF-078763	<u>T-31-N, R-5-W</u> Sec. 5: All Sec. 8: NE/4	527.96	Royalty Working Interest Northwest Pipeline Corp. Coastal Oil & Gas ORRI Total	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	 2.12829% .78718%
	<u>T-31-N, R-5-W</u> Sec. 8: S/2	320.00	Royalty Working Interest Northwest Pipeline Corp. Amoco Coastal Oil & Gas Corp. ORRI Total	12.500000% 20.125000% 43.750000% 23.625000% 00.000000% <u>100.000000%</u>	12.500000% 20.125000% 43.750000% 23.625000% 00.000000% <u>100.000000%</u>	 .40643% .88354% .47711%
<u>TRACT 14</u>						
SF-078767	<u>T-31-N, R-5-W</u> Sec. 6: All Sec. 7: All Sec. 8: NW/4 <u>T-31-N, R-6-W</u> Sec. 12: All Sec. 13: Lots 1,2,3,4, W/2, W/2E/2 (A11) Sec. 24: Lots 1,2,3,4, W/2, W/2E/2 (A11)	2518.04	Royalty Working Interest Northwest Pipeline Corp. Coastal Oil & Gas Corp. ORRI Total	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	12.500000% 63.875000% 23.625000% 00.000000% <u>100.000000%</u>	 10.15063% 3.75434%

Effective December 1, 1981

SCHEDULE XV
FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>NUMBER DESCRIPTION</u>	<u>OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 21</u>						
SF-079165	<u>T-31-N, R-5-W</u> Sec. 29: S/2NE/4, E/2SE/4	160.00	Royalty Working Interest Northwest Pipeline Corp. Coastal Oil & Gas Corp. ORRI Total	12.500000% 63.875000% 23.625000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 63.875000% 23.625000% <u>00.000000%</u> <u>100.000000%</u>	 .64499% .23855%
<u>TRACT 25</u>						
E-347-33	<u>T-31-N, R-5-W</u> Sec. 32: NW/4	160.00	Royalty Working Interest El Paso Natural Gas Co. Winnifred Ponder John Brennand Lois J. Willard ORRI Total	12.500000% 52.499848% 17.500032% 8.750060% 8.750060% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 52.599848% 17.500032% 8.750060% 8.750060% <u>00.000000%</u> <u>100.000000%</u>	 .53012% .17672% .08835% .08835%
<u>TRACT 26</u>						
E-347-28	<u>T-31-N, R-5-W</u> Sec. 32: NE/4	160.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	 .88354%
<u>TRACT 27</u>						
E-347-32	<u>T-31-N, R-5-W</u> Sec. 32: S/2	320.00	Royalty Working Interest El Paso Natural Gas Co. ORRI Total	12.500000% 65.625000% 21.875000% <u>100.000000%</u>	12.500000% 65.625000% 21.875000% <u>100.000000%</u>	 1.76708%

SCHEDULE XV
FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 28</u>						
SF-078773	T-31-N, R-5-W Sec. 33: S/2	320.00	Royalty Working Interest	12.500000%	12.500000%	
			Northwest Pipeline Corp.	20.125000%	20.125000%	.40643%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.47711%
			Amoco	43.750000%	43.750000%	.88354%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 29</u>						
SF-078772	T-31-N, R-6-W Sec. 1: All Sec. 3: Lots 5, 6,7,8,9, SE/4, E/2SW/4, SW/4SW/4 Sec. 4: Lots 5, 6,7,8,9, N/2SW/4, NW/4SE/4, SE/4SE/4 T-32-N, R-6-W Sec. 33: W/2	1161.86	Royalty Working Interest	12.500000%	12.500000%	
			Northwest Pipeline Corp.	63.875000%	63.875000%	4.68364%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	1.73231%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
	T-32-N, R-6-W Sec. 34: E/2, E/2W/2, SW/4SW/4 Sec. 35: All	1160.00	Royalty Working Interest	12.500000%	12.500000%	
			Northwest Pipeline Corp.	20.125000%	20.125000%	1.47331%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	1.72953%
			Amoco	43.750000%	43.750000%	3.20284%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 30</u>						
E-289-37	T-31-N, R-6-W Sec. 2: Lots 6, 7,8, S/2	346.91	Royalty Working Interest	12.500000%	12.500000%	
			Northwest Pipeline Corp.	62.050000%	62.050000%	1.39845%
			Coastal Oil & Gas Corp.	22.950000%	22.950000%	.51723%
			ORRI	2.500000%	2.500000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XV
FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 31</u>						
Unknown	<u>T-31-N, R-6-W</u> Sec. 2: Lot 5	9.35	Royalty	12.500000%	00.000000%	0.000000%
			Working Interest			
			L. A. Smith	87.500000%	00.000000%	
			ORRI	0.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 32</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 3 & 4 a portion thereof designated as Tract 37	38.12	Royalty	12.500000%	00.000000%	0.000000%
			Working Interest			
			T. H. McElvain, et al	87.500000%	00.000000%	
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>00.000000%</u>	
Fee	<u>T-32-N- R-6-W</u> Sec. 34: NW/4SW/4	40.00	Royalty	12.500000%	00.000000%	0.000000%
			Working Interest			
			T. H. McElvain, et al	87.500000%	00.000000%	
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>00.000000%</u>	
<u>TRACT 33</u>						
SF-078765	<u>T-31-N, R-6-W</u> Sec. 4: S/2SW/4, SW/4SE/4 Sec. 5: All Sec. 8: NW/4, E/2NE/4 Sec. 9: All Sec. 10: Lots 1,2,3, E/2E/2, NW/4 Sec. 15: Lots 1,2, E/2SW/4, E/2	2220.23	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	8.95010%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	3.31032%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XV
FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 33</u>						
	<u>T-31-N, R-6-W</u> Sec. 8: SW/4	160.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	20.125000%	20.125000%	.20322%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.23855%
			Amoco	43.750000%	43.750000%	.44177%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 34</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 8: W/2NE/4	80.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	.32249%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.11928%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 35</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 10: W/2E/2	160.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	.64499%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.23855%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 36</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 10: Tract 38 Sec. 15: Tract 38	161.52	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	59.882813%	59.882813%	.65112%
			Coastal Oil & Gas Corp.	22.148437%	22.148437%	.24082%
			ORRI	5.468750%	5.468750%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XV
FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 37</u>						
SF-078771	<u>T-31-N, R-6-W</u>	2560.00	Royalty	12.500000%	12.500000%	
	Sec. 11: All		Working Interest			
	Sec. 14: All		Northwest Pipeline Corp.	63.875000%	63.875000%	10.31977%
	Sec. 23: All		Coastal Oil & Gas Corp.	23.625000%	23.625000%	3.81690%
	Sec. 26: All		ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 38</u>						
Fee	<u>T-31-N, R-6-W</u>	80.00	Royalty	12.500000%	12.500000%	
	Sec. 15: Tract 39		Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	.32249%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.11928%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 39</u>						
SF-078766	<u>T-31-N, R-6-W</u>	864.48	Royalty	12.500000%	12.500000%	
	Sec. 22: E/2		Working Interest			
	Sec. 25: Lots 1, 2,3,4, W/2, W/2E/2 (All)		Northwest Pipeline Corp.	63.875000%	63.875000%	3.48486%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	1.28892%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
	<u>T-31-N, R-6-W</u>	248.41	Royalty	12.500000%	12.500000%	
	Sec. 22: Lot1, SW/4, E/2NW/4		Working Interest			
			Northwest Pipeline Corp.	20.125000%	20.125000%	.31550%
			Amoco	43.750000%	43.750000%	.68588%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.37037%
			ORRI	00.000000%	00.000000%	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XV
FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 43</u>						
E-289-43	<u>T-31-N, R-6-W</u> Sec. 15: 8.41 Ac. out of S/2S/2SW/4SW/4 Sec. 22: W/2NW/4	80.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	.44177%
<u>TRACT 44</u>						
E-504-11	<u>T-32-N, R-6-W</u> Sec. 32: W/2	320.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 84.500000% 3.000000% <u>100.000000%</u>	12.500000% 84.500000% 3.000000% <u>100.000000%</u>	1.76708%
<u>TRACT 45</u>						
E-504-13	<u>T-32-N, R-6-W</u> Sec. 32: E/2	320.00	Royalty Working Interest El Paso Natural Gas Co. ORRI Total	12.500000% 65.625000% 21.875000% <u>100.000000%</u>	12.500000% 65.625000% 21.875000% <u>100.000000%</u>	1.76708%
<u>TRACT 46</u>						
Fee	<u>T-32-N, R-6-W</u> Sec. 34: W/2NW/4	80.00	Royalty Working Interest Northwest Pipeline Corp. Coastal Oil & Gas Corp. Amoco ORRI Total	12.500000% 20.125000% 23.625000% 43.750000% 00.000000% <u>100.000000%</u>	12.500000% 20.125000% 23.625000% 43.750000% 00.000000% <u>100.000000%</u>	.10161% .11928% .22089%

SCHEDULE XV
 FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
 ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 47</u>						
E-346-19	<u>T-32-N, R-6-W</u> Sec. 36: W/2	320.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	63.875000%	63.875000%	1.28997%
			Coastal Oil & Gas Corp.	23.625000%	23.625000%	.47711%
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 48</u>						
E-346-24	<u>T-32-N, R-6-W</u> Sec. 36: E/2	320.00	Royalty	12.500000%	12.500000%	1.76708%
			Working Interest			
			El Paso Natural Gas Co.	65.625000%	65.625000%	
			ORRI	<u>21.875000%</u>	<u>21.875000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

NORTHWEST PIPELINE CORPORATION 
ONE OF THE WILLIAMS COMPANIES

LAND DEPARTMENT

139-87

P. O. BOX 8900
SALT LAKE CITY, UTAH 84108-0900
801-584-6669
801-584-7215

March 3, 1987

#133

Assistant Area Oil and Gas Supervisor
Bureau of Land Management
Western National Bank Building
505 Marquette NW, Suite 815
Albuquerque, NM 87102

State of New Mexico
Commissioner of Public Lands
Attn: Mr. Floyd O. Prando
P. O. Box 1148
Santa Fe, NM 87501

State of New Mexico
Oil Conservation Commission
Attn: William J. LeMay
P. O. Box 2088
Santa Fe, NM 87501

Re: Rosa Unit I Sec. No. 587
San Juan and Rio Arriba
Counties, New Mexico
1987 Drilling Program

Gentlemen:

By letter, dated March 31, 1986, Northwest Pipeline Corporation, as Unit Operator, filed a drilling program for the captioned unit providing for the drilling of ten (10) Gallup/Dakota wells. These wells were the Rosa Unit #119, #121, #122, #123, #124, #125, #126, #127, #128 and #120 (which was renamed Rosa Unit #130), which were carried over to the 1986 Drilling Program from 1985 program. These wells were not drilled in 1986 and will be dropped from the drilling program.

As of this date, the total number of wells drilled in the Rosa Unit on acreage committed to the unit is as follows:

Pictured Cliffs, plugged and abandoned	2
Pictured Cliffs/Mesaverde, (Pictured Cliffs non-commercial, Mesaverde commercial)	1
Mesaverde, commerciality undetermined	1
Mesaverde, commercial	26
Mesaverde, non-commercial	4

Assistant Area Oil and Gas Supervisor
 Commissioner of Public Lands
 Oil Conservation Commission
 Rosa Unit 1987 Drilling Program
 March 3, 1987
 Page -2-

Mesaverde, plugged and abandoned	8
Mesaverde/Dakota, commercial	2
Dakota, commercial	5
Dakota, non-commercial	12
Dakota, undetermined	4
Dakota, plugged and abandoned	3
Mesaverde/Gallup/Dakota, (Gallup commerciality undetermined, Dakota and Mesaverde commercial)	1
Gallup/Dakota, commerciality undetermined	20
Gallup/Dakota, plugged and abandoned	1
Gallup, non-commercial	1
Gallup/Dakota, (Gallup commerciality undetermined, Dakota plugged and abandoned)	<u>1</u>
TOTAL	92

Pursuant to Section 9 of the Rosa Unit Agreement, Northwest Pipeline Corporation, has contacted all of the Working Interest Owners and has received the necessary concurrence to propose the drilling of no wells during the calendar year 1987.

Northwest Pipeline Corporation, as Unit Operator, will drill any offset wells that may be required to prevent drainage of unitized substances and any other wells deemed necessary or which are requested by the Unit Operator or the Working Interest Owners.

If this Drilling Program is acceptable, please signify your approval as required under Section 9 of the Unit Agreement in the space provided on the attached sheet and return an approved copy to Northwest Pipeline Corporation.

Copies of this Drilling Program are being sent to the Working Interest Owners as shown on the attached sheet.

Assistant Area Oil and Gas Supervisor
Commissioner of Public Lands
Oil Conservation Commission
Rosa Unit 1987 Drilling Program
March 3, 1987
Page -3-

Sincerely,

NORTHWEST PIPELINE CORPORATION


Darrell L. Gillen
Land Coordinator

DLG:js

Attachment

cc: Working Interest Owners
K. J. Stracke
W. O. Curtis
P. C. Thompson

Assistant Area Oil and Gas Supervisor
Commissioner of Public Lands
Oil Conservation Commission
Rosa Unit 1987 Drilling Program
March 3, 1987
Page -4-

APPROVED _____ DATE _____
Assistant District Manager for Minerals
Bureau of Land Management
Subject to like approval by the
Commissioner of Public Lands and the
Oil Conservation Commission

APPROVED _____ DATE _____
Commissioner of Public Lands
Subject to like approval by the
Assistant Area Oil and Gas Supervisor
and the Oil Conservation Commission

APPROVED *Roy E. Johnson* DATE 3-17-87
Oil Conservation Commission
Subject to like approval by the
Assistant Area Oil and Gas Supervisor
and the Commissioner of Public Lands

The foregoing approvals are for the 1987 Drilling Program for the Rosa Unit I
Sec. No. 587.

ROSA UNIT
WORKING INTEREST OWNERS

The Wiser Oil Company
905 Oil and Gas Building
Wichita Falls, Texas 76301

Mr. William G. Webb
4200 Republic Bank Tower Bldg.
Dallas, Texas 75201

Meridian Oil Production, Inc.
Land Department
P. O. Box 4289
Farmington, NM 87499-4289

Phillips Petroleum Co.
Attention: Dave S. Smith
8055 E. Tufts Avenue Parkway
Denver, Colorado 80237

Elizabeth T. Calloway
4801 St. Johns Drive
Dallas, Texas 75205

John L. Turner
800 Diamond Shamrock Tower
Dallas, Texas 75201

Mercantile National Bank of Dallas
Trustee, Mary Frances Turner, Jr.
Personal Trust Department
P. O. Box 225415
Dallas, Texas 75265

John Brennand
Estate of J. R. Brennand
4476 Meadowlark Lane
Santa Barbara, CA 93105

Gas Producing Enterprises
Attn: North Region-Land Department
2100 Prudential Plaza
P. O. Box 749
Denver, CO 80201

Ms. Lois J. Willard
P. O. Box 5205
Santa Fe, NM 87501

Mitchell Energy Corporation
Attn: Mr. Jerry Taylor
1670 Broadway - Suite 3200
Amoco Building
Denver, CO 80202

Amoco Production Company
Western Division, Production Mgr.
1670 Broadway
Denver, CO 80202

J. Glenn Turner, Jr.
500 LTV Center
2001 Ross Avenue
Dallas, TX 75201

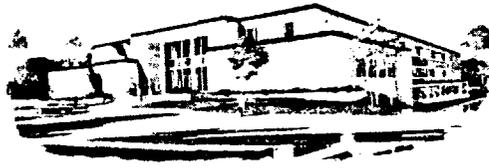
Fred E. Turner
One Energy Square - Suite 852
4925 Greenville Avenue
Dallas, TX 75206

Mr. Frank A. Schultz
730 Fidelity Union Tower
Dallas, TX 75201

Winifred K. Ponder
1800 North Stanton Street
El Paso, TX 79902

Coastal Oil & Gas Corporation
Attn: Mr. John R. Kennedy
P. O. Box 749
600 - 17th Street, Suite 800 S.
Denver, CO 80201

State of New Mexico



#133

JIM BACA
COMMISSIONER

Commissioner of Public Lands

P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

September 10, 1986

Northwest Pipeline Corporation
ATTENTION: Mr. Darrell L. Gillen
P. O. Box 1526
Salt Lake City, Utah 84110-1526

Gentlemen:

The Bureau of Land Management has notified this office that they have granted you approval to the Eleventh, Twelfth, Thirteenth and Fourteenth Expanded Participating Areas to the Mesaverde Formation for the Rosa Unit Area, San Juan and Rio Arriba Counties, New Mexico.

Please be advised that the Commissioner of Public Lands concurs with the Bureau of Land Management and has also this date approved your expansions to the Mesaverde Participating Area.

The Eleventh revision adds 640.00 acres to the Mesaverde Participating Area and is described as the W/2 of Section 22, Township 31 North Range 6 West, and the S/2 of Section 8, Township 31 North, Range 5 West. The Eleventh revision is effective as of April 1, 1981 and is predicated upon the commercial completion of the Rosa Unit wells Nos. 79 and 80.

The Twelfth revision adds 320.00 acres to the Mesaverde Participating Area and is described as the S/2 of Section 33, Township 31 North, Range 5 West. The Twelfth revision is effective as of June 1, 1981 and is predicated upon the commercial completion of the Rosa Unit wells No. 77.

The Thirteenth revision adds 1,280.00 acres to the Mesaverde Participating Area and is described as All of Sections 34 and 35, Township 32 North Range 6 West. The Thirteenth revision is effective as of October 1, 1981 and is predicated upon the commercial completion of the Rosa Unit wells Nos. 89 and 91.

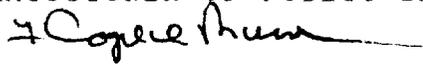
The Fourteenth revision adds 480.00 acres to the Mesaverde Participating Area and is described as the N/2 of Section 20 Township 31 North Range 5 West., and the SW/4 of Section 8, Township 31 North, Range 6 West. The Fourteenth revision is effective as of December 1, 1981 and is predicated upon the commercial completion of the Rosa Unit wells Nos. 85 and 88.

Northwest Pipeline Corporation
August 27, 1986
Page 2

If we may be of further help please do not hesitate to call
on us.

Very truly yours,

JIM BACA
COMMISSIONER OF PUBLIC LANDS

BY: 

FLOYD O. PRANDO, Director
Oil and Gas Division
(505) 827-5744

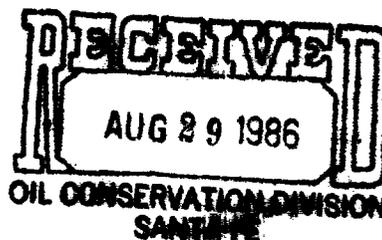
JB, FOP/PM
encs
cc:

OCD-Santa Fe, New Mexico
BLM-Albuquerque, New Mexico
OGAD-Santa Fe, New Mexico

Bureau of Land Management
Albuquerque District Office
Minerals Division
P.O. Box 5770
Albuquerque, NM 87197-6770

Rosa Unit (PA)
3100 (015)

AUG 27 1986



Northwest Pipeline Corporation
ATTN: Darrell L. Gillen
P.O. Box 8900
Salt Lake City, UT 84108-0900

Gentlemen:

We have received your letter of April 18, 1985 in which you requested the approval of the Mesaverde Participating Area in the Rosa Unit, San Juan and Rio Arriba Counties, New Mexico. We have also reviewed the updated information that was submitted by your letter dated November 7, 1985 per our request.

The application for approval of the eleventh revision seeks to add 640.00 acres described as W/2 section 22, T. 31 N., R. 6 W. and S/2 section 8, T 31 N., R. 5 W., NMPM to the Mesaverde Participating Area. The revision is based on the completion of Rosa Unit wells Nos. 79 and 80. The eleventh revision was approved on this date and is effective as of April 1, 1981.

The application for approval of the twelfth revision seeks to add 320.00 acres described as S/2 section 33, T. 31 N., R. 5 W., NMPM to the Mesaverde Participating Area. The revision is based on the completion of the Rosa Unit well No. 77. The twelfth revision was approved on this date and is effective as of June 1, 1981.

The application for approval of the thirteenth revision seeks to add 1280.00 acres described as all of sections 34 and 35, T. 32 N., R. 6 W., NMPM to the Mesaverde Participating Area. The revision is based on the completion of Rosa Unit wells Nos. 89 and 91. The thirteen revision was approved on this date and is effective as of October 1, 1981.

The application for approval of the fourteenth revision seeks to add 480.00 acres described as N/2 section 20, T. 31 N., R. 5 W., and SW/4 section 8, T. 31 N., R. 6 W., NMPM to the Mesaverde Participating Area. The revision is based on the completion of Rosa Unit wells Nos. 85 and 88. The fourteenth revision was approved on this date and is effective as of December 1, 1981.

If you have any questions, please contact Robert Kent at the above address or telephone (505) 766-2841.

Sincerely,

(Orig. Signed - Sid Vogelpohl

For District Manager

cc: Micrographics
FRA (016)
Com. of Public Lands
015:RKent:klm:8-26-86:2151M

NMOCD
O&G chron

Bureau of Land Management
Albuquerque District Office
Minerals Division
P.O. Box 6770
Albuquerque, NM 87197-6770

Rosa Unit POD
3180 (015)

MAY 19 1986



Northwest Pipeline Corporation
ATTN: Darrell L. Gillen
P.O. Box 8900
Salt Lake City, UT 84108-0900

Gentlemen:

Two approved copies of your 1986 Plan of Development for the Rosa Unit area, San Juan and Rio Arriba Counties, New Mexico are enclosed. Such plan, proposing the drilling of ten Gallup/Dakota wells which were carried over from the 1985 drilling program, is approved this date subject to like approval by the appropriate officials of the State of New Mexico.

The possibility of drainage by wells outside of the unit boundary may exist. You will be contacted at a later date about this possibility.

If you have any questions, please contact Shirley Bryant at the above address or telephone (505) 766-2841.

Sincerely,

(Orig. Signed) - Sid Vogelbein

For District Manager

Enclosure(s)

cc:

Micrographics 943B-1
Fluids Section FRAH
✓ NMOC, Santa Fe
Comm. of Pub. Lands, Santa Fe
O&G Chron

015:SBryant:k1m:5-15-86:1878M

NORTHWEST PIPELINE CORPORATION
ONE OF THE WILLIAMS COMPANIES 

LAND DEPARTMENT

263-86

P.O. BOX 8900
SALT LAKE CITY, UTAH 84108-0900
801-584-6669
801-584-7215

March 31, 1986

Assistant Area Oil and Gas Supervisor
Bureau of Land Management
Western National Bank Building
505 Marquette NW, Suite 815
Albuquerque, NM 87102

State of New Mexico
Commissioner of Public Lands
Attn: Mr. Floyd O. Prando
P. O. Box 1148
Santa Fe, NM 87501

State of New Mexico
Oil Conservation Commission
Attn: Richard L. Stamets
P. O. Box 2088
Santa Fe, NM 87501

Re: Rosa Unit I Sec. No. 587
San Juan and Rio Arriba
Counties, New Mexico
1986 Drilling Program

Gentlemen:

By letter dated March 29, 1985, Northwest Pipeline Corporation, as Unit Operator, filed a Drilling Program for the captioned Unit providing for the drilling of ten (10) Gallup/Dakota wells. None of these wells were drilled in 1985. Therefore, they will be carried over to the 1986 Drilling Program. The wells to be carried over are: Rosa Unit #119, #121, #122, #123, #124, #125, #126, #127, #128 and #120 which will be renamed as Rosa Unit #130.

By letter dated May 16, 1985 Northwest filed a Supplemental Drilling Program to drill Rosa Unit #129 Mesaverde well. This well was dropped from the drilling program and not drilled.

Rosa #110, #113 and #114 which were carried over to the 1985 Drilling Program from 1984 were not drilled and will be dropped from the drilling program. The four (4) recompletable Gallup wells #49, #82, #83 and #84 carried over to the 1985 Drilling Program will be dropped from the drilling program. The Rosa #81 well to be recompleted in the Dakota will also be dropped from the drilling program. There were no wells drilled in the 1985 Drilling Program.

As of this date, the total number of wells drilled in the Rosa Unit on acreage committed to the unit is as follows:

Assistant Area Oil and Gas Supervisor
 Commissioner of Public Lands
 Oil Conservation Commission
 Rosa Unit
 March 31, 1986
 Page -2-

Pictured Cliffs, plugged and abandoned	2
Pictured Cliffs/Mesaverde, (Pictured Cliffs non-commercial, Mesaverde commercial)	1
Mesaverde, commerciality undetermined	2
Mesaverde, commercial	26
Mesaverde, non-commercial	3
Mesaverde, plugged and abandoned	8
Mesaverde/Dakota, commercial	2
Dakota, commercial	5
Dakota, non-commercial	12
Dakota, undetermined	4
Dakota, plugged and abandoned	3
Mesaverde/Gallup/Dakota, (Gallup commerciality undetermined, Dakota and Mesaverde commercial)	1
Gallup/Dakota, commerciality undetermined	21
Gallup/Dakota, plugged and abandoned	1
Gallup, non-commercial	<u>1</u>
Total	92

Pursuant to Section 9 of the Rosa Unit Agreement, Northwest Pipeline Corporation, as Unit Operator, has contacted all of the Working Interest Owners and has received the necessary concurrence to propose the drilling of these ten (10) wells carried over from the 1985 Drilling Program.

Northwest Pipeline Corporation, as Unit Operator, will drill any offset wells that may be required to prevent drainage of unitized substances and any other wells deemed necessary or which are requested by the Unit Operator or the Working Interest Owners.

If this Drilling Program is acceptable, please signify your approval as required under Section 10 of the Unit Agreement in the space provided on the attached sheet and return an approved copy to Northwest Pipeline Corporation.

Copies of this Drilling Program are being sent to the Working Interest Owners as shown on the attached sheet.

Assistant Area Oil and Gas Supervisor
Commissioner of Public Lands
Oil Conservation Commission
Rosa Unit
March 31, 1986
Page -3-

Sincerely,

NORTHWEST PIPELINE CORPORATION



Darrell L. Gillen
Land Coordinator

DLG:js

Attachment

cc: Working Interest Owners

Assistant Area Oil and Gas Supervisor
Commissioner of Public Lands
Oil Conservation Commission
Rosa Unit
March 31, 1986
Page -4-

APPROVED _____ DATE _____
Assistant District Manager for Minerals
Bureau of Land Management
Subject to like approval by the
Commissioner of Public Lands and the
Oil Conservation Commission

APPROVED _____ DATE _____
Commissioner of Public Lands
Subject to like approval by the
Assistant Area Oil and Gas Supervisor
and the Oil Conservation Commission

APPROVED  _____ DATE 5-6-86
Oil Conservation Commission
Subject to like approval by the
Assistant Area Oil and Gas Supervisor
and the Commissioner of Public Lands

The foregoing approvals are for the 1986 Drilling Program for the Rosa Unit.

#133

NORTHWEST PIPELINE CORPORATION
ONE OF THE WILLIAMS COMPANIES

LAND DEPARTMENT

263-86

P.O. BOX 8900
SALT LAKE CITY, UTAH 84108-0900
801-584-6669
801-584-7215

March 31, 1986

Assistant Area Oil and Gas Supervisor
Bureau of Land Management
Western National Bank Building
505 Marquette NW, Suite 815
Albuquerque, NM 87102

State of New Mexico
Commissioner of Public Lands
Attn: Mr. Floyd O. Prando
P. O. Box 1148
Santa Fe, NM 87501

State of New Mexico
Oil Conservation Commission
Attn: Richard L. Stamets
P. O. Box 2088
Santa Fe, NM 87501

Re: Rosa Unit I Sec. No. 587
San Juan and Rio Arriba
Counties, New Mexico
1986 Drilling Program

Gentlemen:

By letter dated March 29, 1985, Northwest Pipeline Corporation, as Unit Operator, filed a Drilling Program for the captioned Unit providing for the drilling of ten (10) Gallup/Dakota wells. None of these wells were drilled in 1985. Therefore, they will be carried over to the 1986 Drilling Program. The wells to be carried over are: Rosa Unit #119, #121, #122, #123, #124, #125, #126, #127, #128 and #120 which will be renamed as Rosa Unit #130.

By letter dated May 16, 1985 Northwest filed a Supplemental Drilling Program to drill Rosa Unit #129 Mesaverde well. This well was dropped from the drilling program and not drilled.

Rosa #110, #113 and #114 which were carried over to the 1985 Drilling Program from 1984 were not drilled and will be dropped from the drilling program. The four (4) recomplete Gallup wells #49, #82, #83 and #84 carried over to the 1985 Drilling Program will be dropped from the drilling program. The Rosa #81 well to be recompleted in the Dakota will also be dropped from the drilling program. There were no wells drilled in the 1985 Drilling Program.

Assistant Area Oil and Gas Supervisor
Commissioner of Public Lands
Oil Conservation Commission
Rosa Unit
March 31, 1986
Page -2-

As of this date, the total number of wells drilled in the Rosa Unit on acreage committed to the unit is as follows:

Pictured Cliffs, plugged and abandoned	2
Pictured Cliffs/Mesaverde, (Pictured Cliffs non-commercial, Mesaverde commercial)	1
Mesaverde, commerciality undetermined	2
Mesaverde, commercial	26
Mesaverde, non-commercial	3
Mesaverde, plugged and abandoned	8
Mesaverde/Dakota, commercial	2
Dakota, commercial	5
Dakota, non-commercial	12
Dakota, undetermined	4
Dakota, plugged and abandoned	3
Mesaverde/Gallup/Dakota, (Gallup commerciality undetermined, Dakota and Mesaverde commercial)	1
Gallup/Dakota, commerciality undetermined	21
Gallup/Dakota, plugged and abandoned	1
Gallup, non-commercial	<u>1</u>
Total	92

Pursuant to Section 9 of the Rosa Unit Agreement, Northwest Pipeline Corporation, as Unit Operator, has contacted all of the Working Interest Owners and has received the necessary concurrence to propose the drilling of these ten (10) wells carried over from the 1985 Drilling Program.

Northwest Pipeline Corporation, as Unit Operator, will drill any offset wells that may be required to prevent drainage of unitized substances and any other wells deemed necessary or which are requested by the Unit Operator or the Working Interest Owners.

If this Drilling Program is acceptable, please signify your approval as required under Section 10 of the Unit Agreement in the space provided on the attached sheet and return an approved copy to Northwest Pipeline Corporation.

Copies of this Drilling Program are being sent to the Working Interest Owners as shown on the attached sheet.

Assistant Area Oil and Gas Supervisor
Commissioner of Public Lands
Oil Conservation Commission
Rosa Unit
March 31, 1986
Page -3-

Sincerely,

NORTHWEST PIPELINE CORPORATION

A handwritten signature in cursive script, appearing to read "Darrell L. Gillen".

Darrell L. Gillen
Land Coordinator

DLG:js

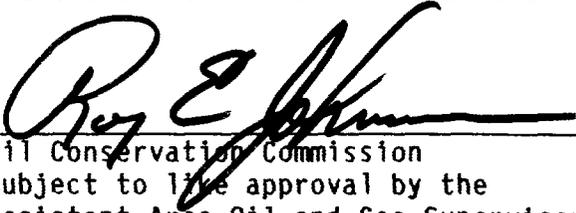
Attachment

cc: Working Interest Owners

Assistant Area Oil and Gas Supervisor
Commissioner of Public Lands
Oil Conservation Commission
Rosa Unit
March 31, 1986
Page -4-

APPROVED _____ DATE _____
Assistant District Manager for Minerals
Bureau of Land Management
Subject to like approval by the
Commissioner of Public Lands and the
Oil Conservation Commission

APPROVED _____ DATE _____
Commissioner of Public Lands
Subject to like approval by the
Assistant Area Oil and Gas Supervisor
and the Oil Conservation Commission

APPROVED  _____ DATE 4-25-86
Oil Conservation Commission
Subject to like approval by the
Assistant Area Oil and Gas Supervisor
and the Commissioner of Public Lands

The foregoing approvals are for the 1986 Drilling Program for the Rosa Unit.

ROSA UNIT
WORKING INTEREST OWNERS

The Wiser Oil Company
905 Oil and Gas Building
Wichita Falls, Texas 76301

Mr. William G. Webb
4200 Republic Bank Tower Bldg.
Dallas, Texas 75201

Meridian Oil Production, Inc.
Land Department
P. O. Box 4289
Farmington, NM 87499-4289

Phillips Petroleum Co.
Attention: Steve F. Beasley
8055 E. Tufts Avenue Parkway
Denver, Colorado 80237

Elizabeth T. Calloway
4801 St. Johns Drive
Dallas, Texas 75205

John L. Turner
800 Diamond Shamrock Tower
Dallas, Texas 75201

Mercantile National Bank of Dallas
Trustee, Mary Frances Turner, Jr.
Personal Trust Department
P. O. Box 225415
Dallas, Texas 75265

Ms. Lois J. Willard
P. O. Box 5205
Santa Fe, NM 87501

Mitchell Energy Corporation
Attn: Mr. Jerry Taylor
1670 Broadway - Suite 3200
Amoco Building
Denver, CO 80202

Amoco Production Company
Western Division, Production Mgr.
1670 Broadway
Denver, CO 80202

J. Glenn Turner, Jr.
1700 Mercantile Bank Building
Dallas, TX 75201

Fred E. Turner
One Energy Square - Suite 852
4925 Greenville Avenue
Dallas, TX 75206

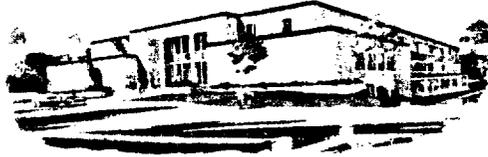
Mr. Frank A. Schultz
730 Fidelity Union Tower
Dallas, TX 75201

Winifred K. Ponder
1800 North Stanton Street
El Paso, TX 79902

Coastal Oil & Gas Corporation
Attn: Mgr., Joint Interest Oper
P. O. Box 749
600 - 17th Street, Suite 800 S.
Denver, CO 80201

0043t

State of New Mexico



JIM BACA
COMMISSIONER

Commissioner of Public Lands

April 28, 1986

P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148
Express Mail Delivery Uses
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

Northwest Pipeline Corporation
Attn: Darrall L. Gillen
P. O. Box 8900
Salt Lake City Utah 84108-0900

Re: Rosa Unit
San Juan County, New Mexico
1986 Drilling Program

Re: [unclear]

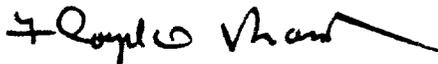
The Commissioner of Public Lands has this date approved your 1985 Drilling Program for the Rosa Unit Area, San Juan County, New Mexico. Such plan calls for the drilling of the Rosa Unit Well Nos. 119, 121, 122, 123, 124, 125, 126, 127, 128 and 129 will be renamed Rosa Unit Well No. 130. These wells have been carried over from your 1985 Drilling Program. You also advised that the Rosa Unit Well No. 129 which was to test the Mesaverde formation has been dropped from the 1985 drilling program and has not been drilled.

Our approval is subject to like approval by the New Mexico Oil Conservation Division and the Bureau of Land Management.

Enclosed is an approved copy for your files.

Very truly yours,

JIM BACA
COMMISSIONER OF PUBLIC LANDS

BY: 
FLOYD O. PRANDO, Director
Oil and Gas Division
(505) 827-5744

JB/FOP/pm
encs.

cc: OCD-Santa Fe, New Mexico
BLM-Albuquerque, New Mexico Attn: Fluids Branch

NORTHWEST PIPELINE CORPORATION 
ONE OF THE WILLIAMS COMPANIES

LAND DEPARTMENT

316-85

P.O. BOX 8900
SALT LAKE CITY, UTAH 84108-0900
801-584-6669
801-584-7215

January 1, 1986

133

Assistant District Manager, Minerals
Bureau of Land Management
Western National Bank Building
505 Marquette NW, Suite 815
Albuquerque, NM 87102

State of New Mexico
Commissioner of Public Lands
Attention: Mr. Ray D. Graham
P. O. Box 1148
Santa Fe, NM 87501

State of New Mexico
Oil Conservation Division
Attention: Mr. Richard L. Stamets
P. O. Box 2088
Santa Fe, NM 87501

Re: Rosa Unit I Sec. 587
San Juan & Rio Arriba Counties, New Mexico

APPLICATION FOR APPROVAL OF THE INITIAL PARTICIPATING AREA
Dakota Formation
Effective January 10, 1966

APPLICATION FOR APPROVAL OF THE FIRST EXPANDED PARTICIPATING AREA
Dakota Formation
Effective September 1, 1978

APPLICATION FOR APPROVAL OF THE SECOND EXPANDED PARTICIPATING AREA
Dakota Formation
Effective November 1, 1978

APPLICATION FOR APPROVAL OF THE THIRD EXPANDED PARTICIPATING AREA
Dakota Formation
Effective June 1, 1980

APPLICATION FOR APPROVAL OF THE FOURTH EXPANDED PARTICIPATING AREA
Dakota Formation
Effective March 1, 1981

Bureau of Land Management
Commissioner of Public Lands
Oil Conservation Division
Page 2
January 1, 1986

APPLICATION FOR APPROVAL OF THE FIFTH EXPANDED PARTICIPATING AREA
Dakota Formation
Effective April 1, 1981

APPLICATION FOR APPROVAL OF THE SIXTH EXPANDED PARTICIPATING AREA
Dakota Formation
Effective May 1, 1981

Gentlemen:

Pursuant to the provisions of Section 10 of the Rosa Unit Agreement I Sec. No. 587, approved January 24, 1948 NORTHWEST PIPELINE CORPORATION, as Unit Operator, hereby respectfully requests approval of the captioned Participating Areas for the Dakota Formation.

These proposed Participating Areas for the Dakota Formation are predicated upon the determination by NORTHWEST PIPELINE CORPORATION, as Unit Operator, that the following Rosa Unit Dakota Wells are capable of producing unitized substances in paying quantities.

INITIAL PARTICIPATING AREA - Effective January 10, 1966

<u>Description of Lands</u>	<u>No. of Acres</u>
<u>Township 31 North, Range 5 West, N.M.P.M.</u> Section 10: N/2	320.00

The well data is as follows:

The Rosa Unit #70 well is located 575 feet from the north line and 1300 feet from the west line, Section 10, Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on October 24, 1965 and completed on January 10, 1966 in the Dakota Formation at a plug back depth of 8189 feet.

The Dakota Formation was sand-water fractured below the casing from 8195 feet to 8330 feet, and later perforated from 8166 feet to 8178 feet with four shots per foot. This zone was treated with 500 gallons of mud acid. Prior to acidizing and setting tubing, the well was shut-in with a SIPC of 2280 psig. On January 10, 1966 five hours after perforating, the well flowed at a rate of 1450 Mcf/D.

FIRST EXPANDED PARTICIPATING AREA - Effective September 1, 1978

Bureau of Land Management
Commissioner of Public Lands
Oil Conservation Division
Page 3
January 1, 1986

<u>Description of Lands</u>	<u>No. of Acres</u>
<u>Township 31 North, Range 5 West, N.M.P.M.</u> Section 17: E/2	320.00
<u>Township 31 North, Range 6 West, N.M.P.M.</u> Section 13: W/2	320.00

The well data is as follows:

The Rosa Unit #66 well is located 1960 feet from the south line and 815 feet from the west line, Section 13, Township 31 North, Range 6 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on June 4, 1978 and completed on August 11, 1978 in the Dakota Formation at a plug back depth of 8070 feet. The Dakota Formation was perforated at the following depths with two shots per foot:

7913-28', 7960-84', 8032-38', 8050-58'

These perforations were fractured with sand and frac fluid. The well was shut-in with a SIPT of 2968 and a SIPC of 2958 psig. On August 11, 1978 the well was tested and after flowing for three hours through a 3/4 inch variable choke on the 2 3/8 inch tubing the well gauged 4427 Mcf/D with a calculated AOF of 5039 Mcf/D.

The Rosa Unit #65 well is located 1140 feet from the north line and 860 feet from the east line, Section 17, Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on July 14, 1978 and completed on August 25, 1978 in the Dakota Formation at a plug back depth of 8030 feet. The Dakota Formation was perforated at the following depths:

7874-92', 7920-45', 7999-8017'

These perforations were fractured with sand and frac fluid. The well was shut-in with a SIPT of 2624 and a SIPC of 2625 psig. On August 25, 1978 the well was tested and after flowing for three hours through a 3/4 inch variable choke on the 2 3/8 inch tubing the well gauged 3095 Mcf/D with a calculated AOF of 3585 Mcf/D.

SECOND EXPANDED PARTICIPATING AREA - Effective November 1, 1978

<u>Description of Lands</u>	<u>No. of Acres</u>
<u>Township 31 North, Range 5 West, N.M.P.M.</u> Section 29: E/2	320.00

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Commissioner of Public Lands
Oil Conservation Division
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January 1, 1986

The well data is as follows:

The Rosa Unit #64 well is located 790 feet from the north line and 790 feet from the east line, Section 29, Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on August 7, 1978 and completed on October 5, 1978 in the Dakota Formation at a plug back depth of 8070 feet. The Dakota Formation was perforated at the following depths with two shots per foot:

7950-68', 8001-14'

These perforations were fractured with sand and frac fluid. The well was shut-in October 5, 1978 for 25 days with a SIPT of 2280 and a SIPC of 2280 psig. On October 30, 1978 the well was tested and after flowing for three hours through a 3/4 inch variable choke on the 2 3/8 inch tubing the well gauged 1321 Mcf/D with a calculated AOF of 1843 Mcf/D.

THIRD EXPANDED PARTICIPATING AREA - Effective June 1, 1980

<u>Description of Lands</u>	<u>No. of Acres</u>
<u>Township 31 North, Range 5 West, N.M.P.M.</u> Section 17: W/2	320.00

The well data is as follows:

The Rosa Unit #68 well is located 1850 feet from the south line and 790 feet from the west line, Section 17, Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on August 12, 1979 and completed on October 2, 1979 in the Dakota Formation at a plug back depth of 8094 feet. The Dakota Formation was perforated with two shots per foot at the following depths:

7864-80', 7910-26', 7998-8016', 8042-57'

These perforations were fractured with sand and frac fluid. The well was shut-in and a SIPC of 2460 psig and a SIPT of 2460 psig were measured. On May 16, 1980 the well was tested and after flowing for three hours through a 3/4 inch variable choke on the 2 3/8 inch tubing the well gauged 5757 Mcf/D with a calculated AOF of 6938 Mcf/D.

FOURTH EXPANDED PARTICIPATING AREA - Effective March 1, 1981

<u>Description of Lands</u>	<u>No. of Acres</u>
<u>Township 31 North, Range 6 West, N.M.P.M.</u> Section 22: W/2	320.00

Bureau of Land Management
Commissioner of Public Lands
Oil Conservation Division
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January 1, 1986

The well data is as follows:

The Rosa Unit #79 well is located 1800 feet from the south line and 1780 feet from the west line, Section 22, Township 31 North, Range 6 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on December 5, 1980 and completed on February 27, 1981. The Dakota Formation was perforated with 64 holes between the following depths:

7772-88', 7817-31'

These perforations were sand/water fractured. This well has two tubing strings. The well was shut-in with a SIPT of 2901 psig. On February 27, 1981 the well was tested and after flowing for three hours through a 3/4 inch variable choke on the 1 1/2 inch tubing, the well gauged 1858 Mcf/D with a calculated AOF of 1960 Mcf/D.

FIFTH EXPANDED PARTICIPATING AREA - Effective April 1, 1981

<u>Description of Lands</u>	<u>No. of Acres</u>
<u>Township 31 North, Range 5 West, N.M.P.M.</u> Section 8: S/2	320.00

The well data is as follows:

The Rosa Unit #80 well is located 1660 feet from the south line and 1789 feet from the west line, Section 8, Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on November 22, 1980 and completed on March 12, 1981. The Dakota Formation was perforated with 56 holes between the following depths:

7845-57', 7897-7909'

These perforations were treated with 500 gallons of HCL followed by sand/water fracturing. This well has two tubing strings. The well was shut-in with a SIPT of 2553 psig. On March 12, 1981 the well was tested and after flowing for three hours through 3/4 inch variable choke on the 1 1/2 inch tubing, the well gauged 1176 Mcf/D with a calculated AOF of 1177 Mcf/D.

SIXTH EXPANDED PARTICIPATING AREA - Effective May 1, 1981

<u>Description of Lands</u>	<u>No. of Acres</u>
<u>Township 31 North, Range 5 West, N.M.P.M.</u> Section 33: S/2	320.00

The well data is as follows:

Bureau of Land Management
Commissioner of Public Lands
Oil Conservation Division
Page 6
January 1, 1986

The Rosa Unit #77 well is located 1820 feet from the south line and 810 feet from the west line, Section 33, Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on November 5, 1980 and completed on April 27, 1981. The Dakota Formation was perforated with 132 holes between the following depths:

7989' - 8091'

The perforations were sand/water fractured. This well has one tubing string. The well was shut-in with a SIPT of 2561 psig. On April 29, 1981 the well was tested and after flowing for three hours through a 3/4 inch variable choke on the 1 1/2 inch tubing, the well gauged 2544 Mcf/D with a calculated AOF of 2714 Mcf/D.

In support of this application, the following listed exhibits are made a part hereof:

EXHIBIT "A"

Ownership map reflecting the boundaries of the Unit and the proposed Dakota Participating Areas with the Rosa Unit.

EXHIBIT "B"

Geologic Report on the proposed Participating Areas within the Rosa Unit.

EXHIBIT "C"

- Figure No. 1: Structure Map
- Figure No. 2: Net Sand Thickness Map Upper Dakota Sand
- Figure No. 3: Gross Sand Thickness Map
- Figure No. 4: Typical Well Log
- Figure No. 5: Stratigraphic Cross Section A-A'
- Figure No. 6: Stratigraphic Cross Section B-B'

EXHIBIT "D"

Rosa Unit Production Schedule.

Attached hereto are Schedules showing the proposed Dakota Participating Areas. The schedules describe the Participating Areas, show the percentage of unitized substances allocated to each unitized tract, and the percentage of ownership in the tracts.

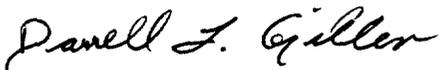
If the proposed Participating Areas set forth herein meet with your approval, please indicate such approval in the space provided on the attached sheet and return an approved copy for our files.

Bureau of Land Management
Commissioner of Public Lands
Oil Conservation Division
Page 7
January 1, 1986

Copies of this letter, exhibits and schedules are being sent to the Working Interest Owners shown on the attached sheet.

Sincerely,

NORTHWEST PIPELINE CORPORATION



Darrell L. Gillen
Land Coordinator

DLG:js

Attachments

cc: Working Interest Owners

Bureau of Land Management
Commissioner of Public Lands
Oil Conservation Division
Page 8
January 1, 1986

APPROVED _____
Assistant District Manager, Minerals
Subject to like approval by the
Commissioner of Public Lands and the
Oil Conservation Division

DATE _____

APPROVED _____
Commissioner of Public Lands
Subject to like approval by the
Assistant Area Oil and Gas Supervisor
and the Oil Conservation Division

DATE _____

APPROVED  _____
Oil Conservation Division
Subject to like approval by the
Assistant Area Oil and Gas Supervisor
and the Commissioner of Public Lands

DATE 1-21-86

The foregoing are approvals for the INITIAL, FIRST, SECOND, THIRD, FOURTH, FIFTH and SIXTH EXPANDED PARTICIPATING AREAS in the Dakota Formation of the Rosa Unit.

ROSA UNIT
WORKING INTEREST OWNERS

The Wiser Oil Company
905 Oil and Gas Building
Wichita Falls, Texas 76301

Mr. William G. Webb
4200 Republic Bank Tower Bldg.
Dallas, Texas 75201

Meridian Oil Production, Inc.
Land Department
P. O. Box 4289
Farmington, NM 87499-4289

Phillips Petroleum Co.
Attention: T. C. Doughty
8055 E. Tufts Avenue Parkway
Denver, Colorado 80237

Elizabeth T. Calloway
4801 St. Johns Drive
Dallas, Texas 75205

John L. Turner
800 Diamond Shamrock Tower
Dallas, Texas 75201

Mercantile National Bank of Dallas
Trustee, Mary Frances Turner, Jr.
Personal Trust Department
P. O. Box 225415
Dallas, Texas 75265

Ms. Lois J. Willard
P. O. Box 5205
Santa Fe, NM 87501

Mitchell Energy Corporation
Attn: Mr. Jerry Taylor
1670 Broadway - Suite 3200
Amoco Building
Denver, CO 80202

Amoco Production Company
Western Division, Production Mgr.
1670 Broadway
Denver, CO 80202

J. Glenn Turner, Jr.
1700 Mercantile Bank Building
Dallas, TX 75201

Fred E. Turner
One Energy Square - Suite 852
4925 Greenville Avenue
Dallas, TX 75206

Mr. Frank A. Schultz
730 Fidelity Union Tower
Dallas, TX 75201

Winifred K. Ponder
1800 North Stanton Street
El Paso, TX 79902

Coastal Oil & Gas Corporation
Attn: Mgr., Joint Interest Oper
P. O. Box 749
600 - 17th Street, Suite 800 S.
Denver, CO 80201

UNIT AREA EXPANSION SCHEDULE

0503t

SCHEDULE
 INITIAL PARTICIPATING AREA DAKOTA FORMATION
 ROSA UNIT

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
			<u>TRACT 13</u>			
USA SF-078763	<u>T-31-N, R-5-W</u> Sec. 10: N/2	320.00	Royalty	12.500000%	12.500000%	100.000000%
			Working Interest			
			Amoco Production Co.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

Effective January 10, 1966

SCHEDULE
INITIAL PARTICIPATING AREA DAKOTA FORMATION
ROSA UNIT

RECAPITULATION

Township 31 North, Range 5 West
Section 10: N/2

Total Number of Acres in Participating Area:	320.00
Total Number of Acres Committed in Participating Area:	320.00

UNIT AREA EXPANSION SCHEDULE

SCHEDULE
FIRST EXPANDED PARTICIPATING AREA DAKOTA FORMATION
ROSA UNIT

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 13</u>						
USA SF-078763	<u>T-31-N, R-5-W</u> Sec. 10: N/2 Sec. 8 NE/4 Sec. 8: S/2	320.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	33.333333%
<u>TRACT 14</u>						
USA SF-078767	<u>T-31-N, R-6-W</u> Sec. 13: W/2	320.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	33.333333%
USA SF-079769	<u>T-31-N, R-5-W</u> Sec. 17: E/2	320.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	33.333334%

Effective September 1, 1978

SCHEDULE
FIRST EXPANDED PARTICIPATING AREA DAKOTA FORMATION
ROSA UNIT

RECAPITULATION

Township 31 North, Range 5 West

Section 10: N/2

Section 17: E/2

Township 31 North, Range 6 West

Section 13: W/2

Total Number of Acres in Participating Area:	960.00
Total Number of Acres Committed in Participating Area:	960.00

SCHEDULE II
SECOND EXPANDED PARTICIPATING AREA DAKOTA FORMATION
ROSA UNIT

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 13</u>						
USA SF-078763	<u>T-31-N, R-5-W</u> Sec. 10: N/2	320.00	Royalty	12.500000%	12.500000%	25.000000%
			Working Interest			
			Amoco Production Co.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 14</u>						
USA SF-078767	<u>T-31-N, R-6-W</u> Sec. 13: W/2	320.00	Royalty	12.500000%	12.500000%	25.000000%
			Working Interest			
			Amoco Production Co.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 17</u>						
USA SF-078769	<u>T-31-N, R-5-W</u> Sec. 17: E/2	320.00	Royalty	12.500000%	12.500000%	25.000000%
			Working Interest			
			Amoco Production Co.	87.500000%	87.500000%	
			ORRI	<u>0.000000%</u>	<u>0.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 18</u>						
USA SF-078764	<u>T-31-N, R-5-W</u> Sec. 29: N/2NE/4 W/2SE/4	160.00	Royalty	12.500000%	12.500000%	12.500000%
			Working Interest			
			Amoco Production Co.	87.500000%	87.500000%	
			ORRI	<u>0.000000%</u>	<u>0.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 21</u>						
USA SF-079165	<u>T-31-N, R-5-W</u> Sec. 29: S/2NE/4 E/2SE/4	160.00	Royalty	12.500000%	12.500000%	12.500000%
			Working Interest			
			Amoco Production Co.	87.500000%	87.500000%	
			ORRI	<u>0.000000%</u>	<u>0.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

Effective November 1, 1978

UNIT AREA EXPANSION SCHEDULE

SCHEDULE II
SECOND EXPANDED PARTICIPATING AREA DAKOTA FORMATION
ROSA UNIT

RECAPITULATION

Township 31 North, Range 5 West

Section 10: N/2

Section 17: E/2

Section 29: E/2

Township 31 North, Range 6 West

Section 13: W/2

Total Number of Acres in Participating Area:	1,280.00
Total Number of Acres Committed in Participating Area:	1,280.00

Effective November 1, 1978

SCHEDULE III
THIRD EXPANDED PARTICIPATING AREA DAKOTA FORMATION
ROSA UNIT

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 13</u>						
USA SF-078763	<u>T-31-N, R-5-W</u> Sec. 10: N/2	320.00	Royalty	12.500000%	12.500000%	20.000000%
			Working Interest			
			Amoco Production Co.	87.500000%	87.500000%	
			ORRI	<u>0.000000%</u>	<u>0.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 14</u>						
USA SF-078767	<u>T-31-N, R-6-W</u> Sec. 13: W/2	320.00	Royalty	12.500000%	12.500000%	20.000000%
			Working Interest			
			Amoco Production Co.	87.500000%	87.500000%	
			ORRI	<u>0.000000%</u>	<u>0.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 17</u>						
USA SF-078769	<u>T-31-N, R-5-W</u> Sec. 17: All	640.00	Royalty	12.500000%	12.500000%	40.000000%
			Working Interest			
			Amoco Production Co.	87.500000%	87.500000%	
			ORRI	<u>0.000000%</u>	<u>0.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 18</u>						
USA SF-078764	<u>T-31-N, R-5-W</u> Sec. 29: N/2NE/4 W/2SE/4	160.00	Royalty	12.500000%	12.500000%	10.000000%
			Working Interest			
			Amoco Production Co.	87.500000%	87.500000%	
			ORRI	<u>0.000000%</u>	<u>0.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 21</u>						
USA SF-079165	<u>T-31-N, R-5-W</u> Sec. 29: S/2NE/4 E/2SE/4	160.00	Royalty	12.500000%	12.500000%	10.000000%
			Working Interest			
			Amoco Production Co.	87.500000%	87.500000%	
			ORRI	<u>0.000000%</u>	<u>0.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE III
THIRD EXPANDED PARTICIPATING AREA DAKOTA FORMATION
ROSA UNIT

RECAPITULATION

Township 31 North, Range 5 West

Section 10: N/2

Section 29: E/2

Section 17: All

Township 31 North, Range 6 West

Section 13: W/2

Total Number of Acres in Participating Area:	1,600.00
Total Number of Acres Committed in Participating Area:	1,600.00

UNIT AREA EXPANSION SCHEDULE

SCHEDULE IV
 FOURTH EXPANDED PARTICIPATING AREA DAKOTA FORMATION
 ROSA UNIT

ACTUAL SERIAL NUMBER	DESCRIPTION	NUMBER OF ACRES	DRILLING BLOCK OWNERSHIP	PERCENTAGE PERCENTAGE	PERCENTAGE COMMITTED	PRESENT PARTICIPATION
<u>TRACT 13</u>						
USA SF-078763	<u>T-31-N, R-5-W</u> Sec. 10: N/2	320.00	Royalty	12.500000%	12.500000%	16.666667%
			Working Interest			
			Amoco Production Co.	87.500000%	87.500000%	
			ORRI	<u>0.000000%</u>	<u>0.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 14</u>						
USA SF-078767	<u>T-31-N, R-6-W</u> Sec. 13: W/2	320.00	Royalty	12.500000%	12.500000%	16.666667%
			Working Interest			
			Amoco Production Co.	87.500000%	87.500000%	
			ORRI	<u>0.000000%</u>	<u>0.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 17</u>						
USA SF-078769	<u>T-31-N, R-5-W</u> Sec. 17: All	640.00	Royalty	12.500000%	12.500000%	33.333334%
			Working Interest			
			Amoco Production Co.	87.500000%	87.500000%	
			ORRI	<u>0.000000%</u>	<u>0.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 18</u>						
USA SF-078764	<u>T-31-N, R-5-W</u> Sec. 29: N/2NE/4 W/2SE/4	160.00	Royalty	12.500000%	12.500000%	8.333333%
			Working Interest			
			Amoco Production Co.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 21</u>						
USA SF-079165	<u>T-31-N, R-5-W</u> Sec. 29: S/2NE/4 E/2SE/4	160.00	Royalty	12.500000%	12.500000%	8.333333%
			Working Interest			
			Amoco Production Co.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

Effective March 1, 1981

SCHEDULE IV
FOURTH EXPANDED PARTICIPATING AREA DAKOTA FORMATION
ROSA UNIT

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 39</u>						
USA SF-078766	<u>T-31-N, R-6-W</u> Sec. 22: Lot 1, E/2NW/4, SW/4	248.50	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.942708%
<u>TRACT 43</u>						
E-289-43	<u>T-31-N, R-6-W</u> Sec. 22: portion Tract 40 lying in W/2NW/4	71.50	Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	3.723958%

UNIT AREA EXPANSION SCHEDULE

SCHEDULE IV
FOURTH EXPANDED PARTICIPATING AREA DAKOTA FORMATION
ROSA UNIT

RECAPITULATION

Township 31 North, Range 5 West

Section 10: N/2

Section 29: E/2

Section 17: All

Township 31 North, Range 6 West

Section 13: W/2

Section 22: W/2

Total Number of Acres in Participating Area:	1,920.00
Total Number of Acres Committed in Participating Area:	1,920.00

Effective March 1, 1981

SCHEDULE V
FIFTH EXPANDED PARTICIPATING AREA DAKOTA FORMATION
ROSA UNIT

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 13</u>						
USA SF-078763	<u>T-31-N, R-5-W</u> Sec. 8: S/2 Sec. 10: N/2	640.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	28.571429%
<u>TRACT 14</u>						
USA SF-078767	<u>T-31-N, R-6-W</u> Sec. 13: W/2	320.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	14.285714%
<u>TRACT 17</u>						
USA SF-078769	<u>T-31-N, R-5-W</u> Sec. 17: All	640.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	28.571429%
<u>TRACT 18</u>						
USA SF-078764	<u>T-31-N, R-5-W</u> Sec. 29: N/2NE/4 W/2SE/4	160.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	7.142857%
<u>TRACT 21</u>						
USA SF-079165	<u>T-31-N, R-5-W</u> Sec. 29: S/2NE/4 E/2SE/4	160.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	7.142857%

Effective April 1, 1981

SCHEDULE V
FIFTH EXPANDED PARTICIPATING AREA DAKOTA FORMATION
ROSA UNIT

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 39</u>						
USA SF-078766	<u>T-31-N, R-6-W</u> Sec. 22: Lot 1, E/2NW/4, SW/4	248.50	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	11.093750%
<u>TRACT 43</u>						
E-289-43	<u>T-31-N, R-6-W</u> Sec. 22: portion Tract 40 lying in W/2NW/4	71.50	Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	3.191964%

UNIT AREA EXPANSION SCHEDULE

SCHEDULE V
FIFTH EXPANDED PARTICIPATING AREA DAKOTA FORMATION
ROSA UNIT

RECAPITULATION

Township 31 North, Range 5 West

Section 8: S/2

Section 10: N/2

Section 29: E/2

Section 17: All

Township 31 North, Range 6 West

Section 13: W/2

Section 22: W/2

Total Number of Acres in Participating Area:	2,240.00
Total Number of Acres Committed in Participating Area:	2,240.00

Effective April 1, 1981

SCHEDULE VI
SIXTH EXPANDED PARTICIPATING AREA DAKOTA FORMATION
ROSA UNIT

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 13</u>						
USA SF-078763	<u>T-31-N, R-5-W</u> Sec. 8: S/2 Sec. 10: N/2	640.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	25.000000%
<u>TRACT 14</u>						
USA SF-078767	<u>T-31-N, R-6-W</u> Sec. 13: W/2	320.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.500000%
<u>TRACT 17</u>						
USA SF-078769	<u>T-31-N, R-5-W</u> Sec. 17: A11	640.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	25.000000%
<u>TRACT 18</u>						
USA SF-078764	<u>T-31-N, R-5-W</u> Sec. 29: N/2NE/4 W/2SE/4	160.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	6.250000%
<u>TRACT 21</u>						
USA SF-079165	<u>T-31-N, R-5-W</u> Sec. 29: S/2NE/4 E/2SE/4	160.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	6.250000%

SCHEDULE VI
SIXTH EXPANDED PARTICIPATING AREA DAKOTA FORMATION
ROSA UNIT

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 28</u>						
USA SF-078773	<u>T-31-N, R-5-W</u> Sec. 33: S/2	320.00	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.500000%
<u>TRACT 39</u>						
USA SF-078766	<u>T-31-N, R-6-W</u> Sec. 22: Lot 1, E/2NW/4, SW/4	248.50	Royalty Working Interest Amoco Production Co. ORRI Total	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	12.500000% 87.500000% 0.000000% <u>100.000000%</u>	9.707031%
<u>TRACT 43</u>						
E-289-43	<u>T-31-N, R-6-W</u> Sec. 22: portion Tract 40 lying in W/2NW/4	71.50	Royalty Working Interest Phillips Petroleum Co. ORRI Total	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	2.792969%

UNIT AREA EXPANSION SCHEDULE

SCHEDULE VI
SIXTH EXPANDED PARTICIPATING AREA DAKOTA FORMATION
ROSA UNIT

RECAPITULATION

Township 31 North, Range 5 West

Section 8: S/2

Section 33: S/2

Section 10: N/2

Section 29: E/2

Section 17: All

Township 31 North, Range 6 West

Section 13: W/2

Section 22: W/2

Total Number of Acres in Participating Area:	2,560.00
Total Number of Acres Committed in Participating Area:	2,560.00

Effective May 1, 1981

50 YEARS



1935 - 1985



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

September 10, 1985

TONEY ANAYA
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

Northwest Pipeline Corporation
P. O. Box 8900
Salt Lake City, Utah 84108-0900

Attention: Darrell L. Gillen

Re: Rosa Unit, 1 Sec. No. 587
Rio Arriba County, New Mexico
NOTICE OF COMPLETION OF NON-COMMERCIAL WELL
GALLUP FORMATION

#133

Gentlemen:

The above-referenced submittal has been approved by the New Mexico Oil Conservation Division effective this date. Such approval is contingent upon like approval by the New Mexico Commissioner of Public Lands and the Bureau of Land Management.

Sincerely,

ROY E. JOHNSON,
Senior Petroleum Geologist

REJ/dr

cc: Commissioner of Public Lands - Santa Fe
Bureau of Land Management - Albuquerque
OCD District Office - Aztec

NORTHWEST PIPELINE CORPORATION
ONE OF THE WILLIAMS COMPANIES 

LAND DEPARTMENT

597-85

P.O. BOX 8900
SALT LAKE CITY, UTAH 84108-0900
801-584-6669
801-584-7215

August 27, 1985

Assistant District Manager, Minerals
Bureau of Land Management
Western National Bank Building
505 Marquette NW, Suite 815
Albuquerque, NM 87102

State of New Mexico
Commissioner of Public Lands
Attn: Mr. Ray D. Graham
Post Office Box 1148
Santa Fe, NM 87501

State of New Mexico
Oil Conservation Division
Attn: Mr. Richard L. Stamets
Post Office Box 2088
Santa Fe, NM 87501

Re: Rosa Unit, 1 Sec. No. 587
Rio Arriba County, New Mexico
NOTICE OF COMPLETION OF NON-COMMERCIAL WELL
GALLUP FORMATION

Gentlemen:

Pursuant to the provisions of Section 10 of the Rosa Unit Agreement, Northwest Pipeline Corporation, as Unit Operator, has determined that the following described well is not capable of producing unitized substances in paying quantities from the Gallup Formation.

The well data is as follows:

The Rosa Unit #67 well is located 1520 feet from the North line and 1510 feet from the East line of section 14, Township 31 North, Range 6 West, N.M.P.M., Rio Arriba County, New Mexico. The well was spudded on July 4, 1979 and completed in the Gallup Formation on January 18, 1982. The plug back depth is 7840'. The Gallup Formation was perforated with 4 shots per foot over the following intervals:

7056'-7072', 7194'-7202', 7242'-7266', 7586'-7614'.

The perforations in the top interval were treated using 27,210 gallons of frac fluid and 62,840 pounds of 20/40 sand. The perforations in the intervals 7194'-7202' and 7242'-7266' were treated using 26,696 gallons of

Assistant District Manager
Commissioner of Public Lands
Oil Conservation Division
August 27, 1985
Page -2-

frac fluid and 55,784 pounds of 20/40 sand while those perforations in the lowermost interval were treated using 40,398 gallons of frac fluid and 63,974 pounds of 20/40 sand. The well was tested on February 9, 1982 through 3/4 inch choke. During this three hour test the flowing tubing pressure was 73 psig and the flow rate was 980 Mcfd. The SITP was 2775 psig and the SICP was 2950 psig. The calculated AOF for this well was 990 Mcfd.

If this determination meets with your approval, please so indicate such approval in the space provided and return an approved copy for our files. Copies of this letter are being sent to the working interest owners shown on the attached sheet.

Sincerely,

NORTHWEST PIPELINE CORPORATION



Darrell L. Gillen
Land Coordinator

DLG:js

Attachment

cc: Working Interest Owners
K. J. Stracke
W. O. Curtis

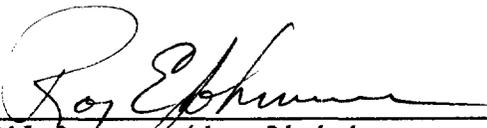
Assistant District Manager
Commissioner of Public Lands
Oil Conservation Commission
August 27, 1985
Page -3-

APPROVED _____
Assistant District Manager, Minerals
Bureau of Land Management
Subject to like approval by
the Commissioner of Public
Lands and the Oil Conservation
Division

DATE _____

APPROVED _____
Commissioner of Public Lands
Subject to like approval by
the Area Oil and Gas Supervisor
and the Oil Conservation Division

DATE _____

APPROVED  _____
Oil Conservation Division
Subject to like approval by the
Area Oil and Gas Supervisor and
the Commissioner of Public Lands

DATE 9-9-85

ROSA UNIT
WORKING INTEREST OWNERS

The Wiser Oil Company
905 Oil and Gas Building
Wichita Falls, Texas 76301

Mr. William G. Webb
4200 Republic Bank Tower Bldg.
Dallas, Texas 75201

Meridian Oil Production, Inc.
Land Department
P. O. Box 4289
Farmington, NM 87499-4289

Phillips Petroleum Co.
Attention: T. C. Doughty
8055 E. Tufts Avenue Parkway
Denver, Colorado 80237

Elizabeth T. Calloway
4801 St. Johns Drive
Dallas, Texas 75205

John L. Turner
800 Diamond Shamrock Tower
Dallas, Texas 75201

Mercantile National Bank of Dallas
Trustee, Mary Frances Turner, Jr.
Personal Trust Department
P. O. Box 225415
Dallas, Texas 75265

Ms. Lois J. Willard
P. O. Box 5205
Santa Fe, NM 87501

Mitchell Energy Corporation
Attn: Mr. Jerry Taylor
1670 Broadway - Suite 3200
Amoco Building
Denver, CO 80202

Amoco Production Company
Western Division, Production Mgr.
1670 Broadway
Denver, CO 80202

J. Glenn Turner, Jr.
1700 Mercantile Bank Building
Dallas, TX 75201

Fred E. Turner
One Energy Square - Suite 852
4925 Greenville Avenue
Dallas, TX 75206

Mr. Frank A. Schultz
730 Fidelity Union Tower
Dallas, TX 75201

Winifred K. Ponder
1800 North Stanton Street
El Paso, TX 79902

Coastal Oil & Gas Corporation
Attn: Mgr., Joint Interest Oper
P. O. Box 749
600 - 17th Street, Suite 800 S.
Denver, CO 80201

Pertinent Data
Rosa Unit
Well #67 (G1)

Drilling Block
N/2 T31N R6W
Section 14

Dedicated
Acres
320

The Rosa Unit #67 well is located 1520 feet from the North line and 1510 feet from the East line of section 14, Township 31 North, Range 6 West, N.M.P.M., Rio Arriba County, New Mexico. The well was spudded on July 4, 1979 and completed in the Gallup formation on January 18, 1982. The plug back depth is 7840'. The Gallup formation was perforated with 4 shots per foot over the following intervals:

7056'-7072', 7194'-7202', 7242'-7266' and 7586'-7614'.

The perforations in the top interval were treated using 27,210 gallons of frac fluid and 62,840 pounds of 20/40 sand. The perforations in the intervals 7194'-7202' and 7242'-7266' were treated using 26,696 gallons of frac fluid and 55,784 pounds of 20/40 sand while those perforations in the lowermost interval were treated using 40,398 gallons of frac fluid and 63,974 pounds of 20/40 sand. The well was tested on February 9, 1982 through a 3/4 inch choke. During this three hour test the flowing tubing pressure was 73 psig and the flow rate was 980 Mcfd. The SITP was 2775 psig and the SICP was 2950 psig. The calculated AOF for this well was 990 Mcfd.

This well has been determined to be non-commercial.

NORTHWEST PIPELINE CORPORATION
GAS RESERVES DEPARTMENT ECONOMIC STUDY
COMMERCIALITY OF ROSA UNIT #67

WORKING INT. B/PAYOUT.....% 100.0
 WORKING INT. A/PAYOUT.....% 100.0
 ANNUAL COST INFLATION.....% 0.0
 INCOME TAX.....% 46.0
 NEG INC TAX OFFSET BY OTHER INCOME 0.0
 UNIT OF PRODUCTION DEPRECIATION

GAS PRODUCTION FROM ROSA UNIT #67
 LAND OWNER ROYALTY.....% 12.5
 AD VALOREM AND SEV TAXES.....% 8.6
 MONTH OF CAPITAL EXPENSE..... 1
 DRILLING COSTS (\$1000)..... 322.6
 SALVAGE VALUE (\$1000)..... 0.0
 OPERRIDING ROYALTY.....% 0.0
 OPERATING COSTS (\$/MO)..... 200.0
 OPERATING COSTS (% OF PROD). 0.0
 TANGIBLE \$ (% OF DRILLING \$) 42.6

YEAR	PRICE \$/MCF	AVG MCF/D	ANNUAL MCF	ROYALTY MCF	REVENUE AFTER ROYALTY \$1000
1982	3.18	0	0	0	0
1983	3.18	17	6250	781	17
1984	3.18	29	10691	1336	30
1985	3.18	19	6777	847	19
1986	3.18	15	5317	665	15
1987	3.18	12	4507	563	13
1988	3.18	11	4170	521	12
1989	3.18	10	3832	479	11
1990	3.18	10	3506	438	10
1991	3.18	8	3176	397	9
1992	3.18	8	2929	366	8
1993	3.18	8	2922	365	8
1994	3.18	8	2827	353	8
1995	3.18	7	2628	329	7
1996	3.18	7	2446	306	7
1997	3.18	6	2278	285	6
1998	3.18	6	2191	274	6
1999	3.18	6	2191	274	6

TO ENDING MONTH

DECLINE %

TO ENDING MONTH

DECLINE %

1
 -NORTHWEST PIPELINE CORPORATION
 GAS RESERVES DEPARTMENT ECONOMIC STUDY
 COMMERCIALITY OF ROSA UNIT #67

2000 3.18 5 2191. 274. 5.
 2001 3.18 6 2191. 274. 6.
 TOTAL..... 73019. 9127. 203.

WORKING INT. B/PAYOUT.....% 100.0
 WORKING INT. A/PAYOUT.....% 100.0
 ANNUAL COST INFLATION.....% 0.0
 INCOME TAX.....% 46.0
 NEG INC TAX OFFSET BY OTHER INCOME

UNIT OF PRODUCTION DEPRECIATION
 DISCOUNT *****PRESENT VALUE***** DISCOUNTED PROFIT TO**
 RATE BEFORE TAX AFTER TAX BEFORE TAX AFTER TAX
 -9.2 0.0
 -6.1 0.0
 15.0 -259. -177. -0.80 0.0 RATE OF RETURN B.T.
 0.55

YEAR	INCOME **\$1000*	**PROJECT CAPIT- *TAL*	EXPENSES IN \$1000*	AD. V. SEV. TAXES	PROD. COSTS	CASH FLOW ANALYSIS IN \$1000*	**CUM BEFORE TAXES	TAXED INCOME	INCOME TAXES	AFTER TAXES
1982	0	323	0	0	0	-323	-323	-185	-85	-237
1983	17	0	12	2	1	15	-307	3	2	14
1984	30	0	20	3	2	25	-283	5	2	23
1985	19	0	13	2	2	15	-268	2	1	14
1986	15	0	10	1	2	11	-257	1	0	11
1987	13	0	8	1	2	9	-248	1	0	9
1988	12	0	8	1	2	8	-240	0	0	8
1989	11	0	7	1	2	7	-232	0	0	7
1990	10	0	7	1	2	6	-226	0	0	7
1991	9	0	6	1	2	6	-220	0	0	6
1992	8	0	6	1	2	5	-215	0	0	5
1993	8	0	6	1	2	5	-210	-1	0	5
1994	8	0	5	1	2	5	-205	-1	0	5
1995	7	0	5	1	2	4	-201	-1	0	5
1996	7	0	5	1	2	4	-197	-1	0	4
1997	6	0	4	1	2	3	-194	-1	0	4
1998	6	0	4	1	2	3	-191	-1	0	4
1999	6	0	4	1	2	3	-188	-1	0	4
2000	6	0	4	1	2	3	-184	-1	0	4
2001	6	0	4	1	2	3	-181	-1	0	4
TOTAL	200	323	138	18	44	-181	0	-181	-83	-98

THIS PROJECT DOES NOT PAYOUT

Bureau of Land Management
Albuquerque District Office
Minerals Division
P.O. Box 6770
Albuquerque, NM 87197-6770

Rosa Unit
3100 (015)

JUL 02 1985

Northwest Pipeline Corporation
ATTN: Darrell L. Gillen
P.O. Box 1526
Salt Lake City, UT 84110

Gentlemen:

An approved copy of your 1985 amended Plan of Development for the Rosa Unit area, Rio Arriba County, is enclosed. Such plan, proposing to recomplete the No. 63 Well in addition to the approved initial 1985 Plan of Development, is approved this date subject to like approval by the appropriate officials of the State of New Mexico.

If you have any questions, please contact Ron Bartel at the above address or telephone (505) 766-2841.

Sincerely,

(Orig. Signed) - Sid Vogelwohl

For District Manager

Enclosure(s)

cc:
NMOCD, Santa Fe
Comm. of Pub. Lands, Santa Fe
Micrographics 943B-1
Fluids Section FRAH
File: Rosa Unit POD
O&G Chron

015:RBartel:klm:7-1-85:0882M

REVISED JULY 1985

EXHIBIT "B"

ROSA UNIT
RIO ARRIBA AND SAN JUAN COUNTIES, NEW MEXICO

GEOLOGIC REPORT
DAKOTA PRODUCING INTERVAL

PROPOSED INITIAL DAKOTA PARTICIPATING AREA AND
FIRST THROUGH SIXTH EXPANSIONS OF THE DAKOTA
PARTICIPATING AREA

NORTHWEST PIPELINE CORPORATION

APPROVED BY:



Kenneth J. Stracke
Director
Production Division

EXHIBIT "B"

ROSA UNIT
RIO ARRIBA AND SAN JUAN COUNTIES, NEW MEXICO

GEOLOGIC REPORT
DAKOTA PRODUCING INTERVAL

PROPOSED INITIAL DAKOTA PARTICIPATING AREA
AND FIRST THROUGH SIXTH EXPANSIONS OF THE
DAKOTA PARTICIPATING AREA

GENERAL INFORMATION

The Rosa Unit is located in the Northeast quadrant of the New Mexico portion of the San Juan Basin along the synclinal axis of the Basin. It is composed of 54,211.01 acres within the unit outline of which 53,733.30 acres are committed to the unit.

Within the Rosa Unit, the Dakota Producing Interval (NMOCC Order No. R 1670-C Rule 25) has been tested in 27 wells resulting in 12 non-commercial wells, seven plugged and abandoned wells, and eight commercial wells.

To date the producing sands within the Dakota Producing Interval are restricted to the Upper (Marine) and Middle (Fluviatile) Dakota Sands. There are no sands developed within the Graneros Shale interval above, and the Lower or Basal Dakota Sands below are apparently water-wet.

As to the producing Dakota Sands, the Upper Dakota Sand is littoral marine sand with depositional characteristics that range from deltaic to off-shore bar in the immediate vicinity of the Rosa Unit. Porosity, grain size and sorting generally increase upward in the Upper Dakota Sand. The sand interval is generally correlatable across the extent of the unit. The Middle Dakota sands are interpreted to be a network of localized fluvial channel deposits. These sands are generally tight, often siliceous, with low porosity in the 0 to 6% range. Local porosity development of greater than 6% and the presence, in some instances, of hi-angle natural fractures permit these sands to be productive. These Middle Dakota Sands are not individually correlatable across the unit.

Well testing information gathered to date does not differentiate the productive capabilities between the Upper and Middle Dakota producing sands. Experience dictates that evaluation of the mechanical logs on these wells can be misleading. The actual drainage pattern for any given well in the Rosa Unit is probably quite irregular and not possible, at this time, to map.

Rosa Expansion
July 1985
Page Two

Included in the report are three maps, a type log and two cross-sections entitled Exhibit "C", Figures 1 through 6.

Exhibit "C", Figure No. 1 shows the configuration of the subsurface structure of the Dakota interval using sea level as the datum plane, the top of the Graneros as the mapping horizon and a contour interval of 50 feet.

The structure map indicates a structural trough extending generally east-west across the Rosa Unit and rising toward the west. This trough is one limb of the synclinal axis of the San Juan Basin. It is apparent that here, as in much of the San Juan Basin, stratigraphy rather than structure controls the accumulation of hydrocarbons within the Dakota Producing Interval.

Exhibit "C", Figure No. 2 is a contour map of the thickness in feet of net reservoir sand which is interpreted from well logs to be present at each drilling site within the Upper Dakota Sand. Sand thickness trends in the San Juan 30-5 and 31-6 Units were extrapolated into the Rosa Unit, but because of limited data the contours should be considered as somewhat speculative.

Exhibit "C", Figure No. 3 indicates the gross sand development within the Middle Dakota interval at each drilling site as interpreted from well logs. No attempt has been made to contour the isopachous thickness of these gross sands.

Exhibit "C", Figure No. 4 is offered as a type log for the Rosa Unit. Completed intervals for this well, the Amoco Production Company's Rosa No. 68, SW/4 Section 17, Township 31 North, Range 5 West, Rio Arriba County, New Mexico, are indicated on the log track. Nomenclature, as used in this report, is indicated between the induction and porosity logs.

Exhibit "C", Figure Nos. 5 and 6 are stratigraphic cross sections of Rosa Unit wells in the area under consideration for participation. The stratigraphic datum for these wells is the base of the Greenhorn.

Exhibit "D", Table 1 is a tabulation of the Dakota gas production from the unit. The cumulative production through June 30, 1985 is shown. The Rosa Unit has produced a total of 10,838,311 Mcf from the Dakota as of July 1, 1985.

It is apparent from these exhibits that continuity of reservoir sands across the unit is questionable in the case of the Upper Dakota Sand and apparently not possible in the case of the Middle Dakota Sands. However, we believe that a 320-acre spacing pattern can be used to effectively produce the Dakota reservoir system. Because of the practical limitations in mapping and predicting a drainage area, it is recommended that each 320-acre tract be designated as a drilling and producing area for the Dakota Formation in this unit at this time.

INITIAL DAKOTA PARTICIPATING AREA

Effective Date: January 10, 1966
Proposed Acreage: Township 31 North, Range 5 West, N.M.P.M.
Section 10: N/2 (320 Acres)

The Initial Dakota Participating Area is based on interpretation of the well logs, the initial test results, and production history of the Rosa Unit No. 70 (formerly Carson #1) Well. From this data, it is inferred that the proposed acreage is capable of producing unitized substances in commercial quantities from the Dakota Producing Interval.

The Rosa Unit No. 70 Well is located 575 feet from the North line and 1300 feet from the West line, Section 10, Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on October 24, 1965 and completed on January 10, 1966, in the Dakota Formation at a plug back depth of 8189 feet.

The Dakota Formation was sand-water fractured below the casing from 8195 feet to 8330 feet, and later perforated from 8166 feet to 8178 feet with four shots per foot. This zone was treated with 500 gallons of mud acid. Prior to acidizing and setting tubing, the well was shut-in with a SIPC of 2280 psig. On January 10, 1966, five hours after perforating, the well flowed at a rate of 1450 Mcf/D.

On the basis of this well, the N/2 of Section 10 (320.00 acres) is recommended as the Initial Dakota Participating Area.

FIRST EXPANSION OF THE DAKOTA PARTICIPATING AREA

Effective Date: September 1, 1978
Proposed Acreage: Township 31 North, Range 6 West, N.M.P.M.
Section 13, W/2 (320 Acres)
Township 31 North, Range 5 West, N.M.P.M.
Section 17, E/2 (320 Acres)
Total Acres: 640

The First Expansion of the Dakota Participating Area is based on interpretation of the well logs, the initial test results, and production history of the Rosa Unit No. 66 Well and the Rosa Unit No. 65 Well. From this data, it is inferred that the proposed acreage is capable of producing unitized substances in commercial quantities from the Dakota Producing Interval. The wells are described as follows:

The Rosa Unit No. 66 Well is located 1960 feet from the South line and 815 feet from the West line, Section 13, Township 31 North, Range 6 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on June 4, 1978 and completed on August 11, 1978 in the Dakota Formation at a plug back depth of 8070 feet. The Dakota Formation was perforated at the following depths with two shots per foot:

7913-28', 7960-84', 8032-38', and 8050-58'.

These perforations were fractured with sand and frac fluid. The well was shut-in with a SIPT of 2968 and a SIPC of 2958 psig. On August 11, 1978 the well was tested and after flowing for three hours through a 3/4 inch variable choke on the 2 3/8 inch tubing, the well gauged 4427 Mcf/D with a calculated AOF of 5039 Mcf/D.

On the basis of this well, the W/2 of Section 13 (320.00 acres) is recommended for inclusion in the First Expansion of the Dakota Participating Area.

The Rosa Unit No. 65 Well is located 1140 feet from the North line and 860 feet from the East line, Section 17, Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on July 14, 1978 and completed on August 25, 1978 in the Dakota Formation at a plug back depth of 8030 feet. The Dakota Formation was perforated at the following depths:

7874-92', 7920-45' and 7999-8017'.

These perforations were fractured with sand and frac fluid. The well was shut-in with a SIPT of 2624 and a SIPC of 2625 psig. On August 25, 1978 the well was tested and after flowing for three hours through a 3/4 inch variable choke on the 2 3/8 inch tubing, the well gauged 3095 Mcf/D with a calculated AOF of 3585 Mcf/D.

On the basis of this well, the E/2 of Section 17 (320.00 acres) is recommended for inclusion in the First Expansion of the Dakota Participating Area.

SECOND EXPANSION OF THE DAKOTA PARTICIPATING AREA

Effective Date: November 1, 1978
Proposed Acreage: Township 31 North, Range 5 West
Section 29: E/2 (320 Acres)

Rosa Expansion
July 1985
Page Five

The Second Expansion of the Dakota Participating Area is based on interpretation of the well logs, initial test results, and production history of the Rosa Unit No. 64 Well. From this data it is inferred that the proposed acreage is capable of producing unitized substances in commercial quantities from the Dakota Producing Interval.

The Rosa Unit No. 64 Well is located 790 feet from the North line and 790 feet from the East line, Section 29, Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on August 7, 1978 and completed on October 5, 1978 in the Dakota Formation at a plug back depth of 8070 feet. The Dakota Formation was perforated at the following depths with two shots per foot:

7950-68' and 8001-14'

These perforations were fractured with sand and frac fluid. The well was shut-in October 5, 1978 for 25 days with a SIPT of 2280 and a SIPC of 2280 psig. On October 30, 1978 the well was tested and after flowing for three hours through a 3/4 inch variable choke on the 2 3/8 inch tubing, the well gauged 1321 Mcf/D with a calculated AOF of 1843 Mcf/D.

On the basis of this well, the E/2 of Section 29 (320.00 acres) is recommended as the Second Expansion of the Dakota Participating Area.

THIRD EXPANSION OF THE DAKOTA PARTICIPATING AREA

Effective Date: June 1, 1980
Proposed Acreage: Township 31 North, Range 5 West, N.M.P.M.
Section 17: W/2 (320 Acres)

The Third Expansion of the Dakota Participating Area is based on interpretation of the well logs, initial test results, and production history of the Rosa Unit No. 68 Well. From this data, it is inferred that the proposed acreage is capable of producing unitized substances in commercial quantities from the Dakota Producing Interval.

The Rosa Unit No. 68 Well is located 1850 feet from the South line and 790 feet from the West line, Section 17, Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on August 12, 1979 and completed on October 2, 1979 in the Dakota

Formation at a plug back depth of 8094 feet. The Dakota Formation was perforated with two shots per foot at the following depths:

7864-80', 7910-26', 7998-8016' and 8042-57'.

These perforations were fractured with sand and frac fluid. The well was shut-in and a SIPC of 2460 psig and a SIPT of 2460 psig were measured. On May 16, 1980 the well was tested and after flowing for three hours through a 3/4 inch variable choke on the 2 3/8 inch tubing, the well gauged 5757 Mcf/D with a calculated AOF of 6938 Mcf/D.

On the basis of this well, the W/2 of Section 17 (320.00 acres) is recommended as the Third Expansion of the Dakota Participating Area.

FOURTH EXPANSION OF THE DAKOTA PARTICIPATING AREA

Effective Date: March 1, 1981
Proposed Acreage: Township 31 North, Range 6 West
Section 22: W/2 (320 Acres)

The Fourth Expansion of the Dakota Participating Area is based on interpretation of the well logs, initial test results, and production history of the Rosa Unit No. 79 Well. From this data, it is inferred that the proposed acreage is capable of producing unitized substances in commercial quantities from the Dakota Producing Interval.

The Rosa Unit #79 Well is located 1800 feet from the South line and 1780 feet from the West line, Section 22, Township 31 North, Range 6 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on December 5, 1980 and completed on February 27, 1981. The Dakota Formation was perforated with 64 holes between the following depths:

7772-7788' and 7817-7831'.

These perforations were sand/water fractured. This well has two tubing strings. The well was shut-in with a SIPT of 2901 psig. On February 27, 1981 the well was tested and after flowing for three hours through a 3/4 inch variable choke on the 1 1/2 inch tubing, the well gauged 1858 Mcf/D with a calculated AOF of 1960 Mcf/D.

On the basis of this well, the W/2 of Section 22 (320.00 acres) is recommended as the Fourth Expansion of the Dakota Participating Area.

Rosa Expansion
July 1985
Page Seven

FIFTH EXPANSION OF THE DAKOTA PARTICIPATING AREA

Effective Date: April 1, 1981
Proposed Acreage: Township 31 North, Range 5 West, N.M.P.M.
Section 8: S/2 (320 Acres)

The Fifth Expansion of the Dakota Participating Area is based on interpretation of the well logs, initial test results, and production history of the Rosa Unit No. 80 Well. From this data, it is inferred that the proposed acreage is capable of producing unitized substances in commercial quantities from the Dakota Producing Interval.

The Rosa Unit #80 Well is located 1660 feet from the South line and 1789 feet from the West line, Section 8, Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on November 22, 1980 and completed on March 12, 1981. The Dakota Formation was perforated with 56 holes between the following depths:

7845-57' and 7897-7909'.

These perforations were treated with 500 gallons of HCL followed by sand/water fracturing. This well has two tubing strings. The well was shut-in with a SIPT of 2553 psig. On March 12, 1981 the well was tested and after flowing for three hours through a 3/4 inch variable choke on the 1 1/2 inch tubing, the well gauged 1176 Mcf/D with a calculated AOF of 1177 Mcf/D.

On the basis of this well, the S/2 of Section 8 (320.00 acres) is recommended as the Fifth Expansion of the Dakota Participating Area.

SIXTH EXPANSION OF THE DAKOTA PARTICIPATING AREA

Effective Date: May 1, 1981
Proposed Acreage: Township 31 North, Range 5 West, N.M.P.M.
Section 33: S/2 (320 Acres)

The Sixth Expansion of the Dakota Participating Area is based on interpretation of the well logs, initial tests results, and production history of the Rosa Unit No. 77 Well. From this data, it is inferred that the proposed acreage is capable of producing unitized substances in commercial quantities from the Dakota Producing Interval.

Rosa Expansion
July 1985
Page Eight

The Rosa Unit #77 Well is located 1820 feet from the South line and 810 feet from the West line, Section 33, Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on November 5, 1980 and completed on April 27, 1981. The Dakota Formation was perforated with 132 holes between the following depths:

7989' and 8091'

These perforations were sand/water fractured. This well has one tubing string. The well was shut-in with a SIPT of 2561 psig. On April 29, 1981 the well was tested and after flowing for three hours through a 3/4 inch variable choke on the 1 1/2 inch tubing, the well gauged 2544 Mcf/D with a calculated AOF of 2714 Mcf/D.

On the basis of this well, the S/2 of Section 33 (320.00 acres) is recommended as the Sixth Expansion of the Dakota Participating Area.

EXHIBIT "D"
TABLE NO. 1

ROSA UNIT: DAKOTA GAS PRODUCTION
SAN JUAN & RIO ARRIBA COUNTIES, NEW MEXICO
GAS VOLUMES IN MCF @ 14.73 PSIA & 60 DEG. F

UNIT WELL NO.	LOCATION	I.D. DATE	JUL 84	AUG 84	SEP 84	OCT 84	NOV 84	DEC 84	JAN 85	FEB 85	MAR 85	APR 85	MAY 85	JUN 85	CUMULATIVE PRODUCTION TO 7/1/85
*43	19J 31N 4W	5/79	1305	0	0	1283	1070	0	4268	2281	2601	2999	1587	0	195651
*63	30G 31N 4W	9/78	0	0	0	0	0	0	0	0	0	0	0	0	9257
*53	8B 31N 5W	7/70	1211	0	0	0	1730	533	5835	4704	4815	2820	4261	0	819949
80	8K 31N 5W	11/81	6430	8892	7115	7030	4675	204	5115	7271	7466	6492	4522	0	266440
70	10D 31N 5W	11/78	2281	0	0	5896	5875	592	10094	8185	3826	4938	8492	2524	510879
*40	11E 31N 5W	3/79	1763	0	0	7946	675	0	7764	4685	0	6518	1764	0	399989
*48	110 31N 5W	3/79	0	244	0	0	0	0	0	0	0	1369	0	0	484312
*61	13N 31N 5W	9/78	0	0	0	2049	388	0	2653	2096	0	2486	853	0	136159
65	17A 31N 5W	4/79	0	0	0	0	917	2665	10401	5698	5597	3931	3623	0	272214
68	17L 31N 5W	8/80	0	0	3268	10556	3289	234	17406	8547	2729	2332	5985	5930	445666
*62	25C 31N 5W	9/78	948	20	1471	3368	680	0	2156	3206	0	4882	1364	0	197687
64	29A 31N 5W	4/79	0	0	2247	6183	477	0	5605	4985	5445	4704	1961	0	297045
*52	33D 31N 5W	7/70	0	0	0	3045	7521	6784	8555	7491	7617	7380	3811	0	1351438
77	33L 31N 5W	4/82	4557	0	2399	4352	4562	2956	6527	4466	5322	4569	865	0	195852
*55	34I 31N 5W	5/75	0	0	702	4242	856	0	9714	6460	6482	5788	4760	0	599394
*56	35E 31N 5W	10/75	0	0	1404	3246	270	0	4708	3183	5715	3499	1201	0	336324
66	13L 31N 6W	4/79	0	0	15562	56700	16893	3969	61523	57756	35541	29347	24574	0	2343053
79	22K 31N 6W	11/81	44727	42600	32573	16017	0	0	0	0	0	18727	29893	0	1015367
*51	23C 31N 6W	7/70	2257	0	0	0	0	151	7829	9293	7727	5538	4614	1231	928746
*54	36K 31N 5W	5/75	0	0	0	0	0	0	0	0	0	0	0	0	32889
TOTAL														10838311	

WELLS PLUGGED AND ABANDONED IN THE DAKOTA FORMATION

49	27M 31N 4W
85	20A 31N 5W
35-X	5K 31N 6W
36	11H 31N 6W
1	110 31N 6W
69	16D 31N 6W
67	14G 31N 6W

* NON-COMMERCIAL



NORTHWEST PIPELINE CORPORATION
ONE OF THE WILLIAMS COMPANIES

Lot:
we are in receipt
of letter
7/24/85
12y

LAND DEPARTMENT

P.O. BOX 1526
SALT LAKE CITY, UTAH 84110-1526
801-584-7215

343-85

June 10, 1985

Assistant Area Oil and Gas Supervisor
Bureau of Land Management
Western National Bank Building
505 Marquette NW, Suite 815
Albuquerque, NM 87102

State of New Mexico
Commissioner of Public Lands
Attn: Mr. Ray D. Graham
P. O. Box 1148
Santa Fe, NM 87501

State of New Mexico
Oil Conservation Commission
Attn: Richard L. Stamets
P. O. Box 2088
Santa Fe, NM 87501

#133

Re: Rosa Unit I Sec. No. 587
Rio Arriba County, New Mexico
Supplemental 1985 Drilling Program

Gentlemen:

By letter dated March 29, 1985, Northwest Pipeline Corporation, as Unit Operator, filed a Drilling Program for the captioned Unit for the Calendar Year 1985.

Amoco Production Company has requested that the following well be recompleted and added to the 1985 Drilling Program.

WELL NUMBER

LOCATION/DEDICATION

#63 Gallup

NE/4 Sec. 30-T 31N - R4W

If this 1985 Supplemental Drilling Program is acceptable, please signify your approval in the space provided and return one (1) copy to this office.

Assistant Area Oil and Gas Supervisor
Commissioner of Public Lands
Oil Conservation Commission
June 10, 1985
Page -2-

Copies of this 1985 Supplemental Drilling Program are being sent to the Working Interest Owners shown on the enclosed sheet.

Sincerely,


Darrell L. Gillen
Land Coordinator

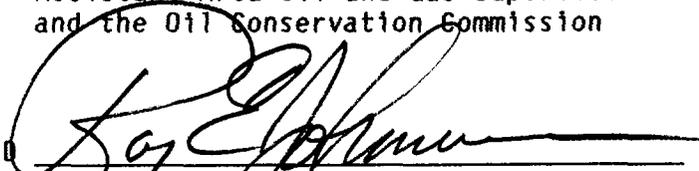
DLG:js

Enclosure

cc: Working Interest Owners

APPROVED _____ Date _____
Assistant Area Oil and Gas Supervisor
Minerals Management Service
Subject to like approval by the
Commissioner of Public Lands and the
Oil Conservation Commission

APPROVED _____ Date _____
Commissioner of Public Lands
Subject to like approval by the
Assistant Area Oil and Gas Supervisor
and the Oil Conservation Commission

APPROVED  _____ Date 6-13-85
Oil Conservation Commission
Subject to like approval by the
Assistant Area Oil and Gas Supervisor
and the Commissioner of Public Lands

The foregoing approvals are for the 1985 Supplemental Drilling Program for the Rosa Unit, Well No. 63 Gallup.

ROSA UNIT
WORKING INTEREST OWNERS

The Wiser Oil Company
905 Oil and Gas Building
Wichita Falls, Texas 76301

Mr. William G. Webb
4200 Republic Bank Tower Bldg.
Dallas, Texas 75201

El Paso Exploration Co.
Attn: James R. Permenter
P. O. Box 1492
El Paso, TX 79978

Phillips Petroleum Co.
Attention: T. C. Doughty
8055 E. Tufts Avenue Parkway
Denver, Colorado 80237

Elizabeth T. Calloway
4801 St. Johns Drive
Dallas, Texas 75205

John L. Turner
800 Diamond Shamrock Tower
Dallas, Texas 75201

Mercantile National Bank of Dallas
Trustee, Mary Frances Turner, Jr.
Personal Trust Department
P. O. Box 225415
Dallas, Texas 75265

Ms. Lois J. Willard
P. O. Box 5205
Santa Fe, NM 87501

Mitchell Energy Corporation
Attn: Mr. Jerry Taylor
1670 Broadway - Suite 3200
Amoco Building
Denver, CO 80202

Amoco Production Company
Western Division, Production Mgr.
1670 Broadway
Denver, CO 80202

J. Glenn Turner, Jr.
1700 Mercantile Bank Building
Dallas, TX 75201

Fred E. Turner
One Energy Square - Suite 852
4925 Greenville Avenue
Dallas, TX 75206

Mr. Frank A. Schultz
730 Fidelity Union Tower
Dallas, TX 75201

Winifred K. Ponder
1800 North Stanton Street
El Paso, TX 79902

Coastal Oil & Gas Corporation
Attn: Mgr., Joint Interest Oper
P. O. Box 749
600 - 17th Street, Suite 800 S.
Denver, CO 80201

0043t

State of New Mexico



JIM BACA
COMMISSIONER



Commissioner of Public Lands

June 5, 1985

#133
P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148
Express Mail Delivery Use:
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

Northwest Pipeline Corporation
P. O. Box 1526
Salt Lake City, Utah 84110-1526

Re: Rosa Unit
Supplemental 1985 Drilling Program
Rio Arriba County, New Mexico

ATTENTION: Mr. Darrell L. Gillen

Gentlemen:

The Commissioner of Public Lands has this date approved your supplemental 1985 Drilling Program for the Rosa Unit Area, Rio Arriba County, New Mexico. Such Supplemental plan dated June 10, 1985, proposes to add the Well No. 63 to test the Gallup formation to be located in the NE/4 of Section 30, Township 31 North, Range 4 West. Our approval is subject to like approval by the New Mexico Oil Conservation Division and the Bureau of Land Management.

Enclosed is an approved copy for your files.

Very truly yours,

JIM BACA
COMMISSIONER OF PUBLIC LANDS

BY: *Ray D. Graham*
RAY D. GRAHAM, Director
Oil and Gas Division
AC 505/827-5744

JB/RDG/pm
encls.

cc: OCD-Santa Fe, New Mexico
BLM-Albuquerque, New Mexico Attn: Fluids Branch
BLM-Roswell, New Mexico Attn: Mr. Armando Lopez

Rosa Unit
3100 (015)

Bureau of Land Management
Albuquerque District Office
Minerals Division
P.O. Box 6770
Albuquerque, NM 87197-6770

JUN 12 1985

#133

Northwest Pipeline Corporation
Attention: Mr. Darrell L. Gillen
P.O. Box 1526
Salt Lake City, UT 84110

Dear Sir:

Two approved copies of your supplemental 1985 Plan of Development for the Rosa Unit area, Rio Arriba County, New Mexico are enclosed. Such plan, proposing to add Rosa Unit Well No. 129 to the list of wells to be drilled in 1985, was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

If you have any questions, please contact Ron Bartel at the above address or telephone (505) 766-2841.

Sincerely,

(Orig. Signed) - Sid Vogelpehl

For District Manager

Enclosure(s)

cc:
NMOCD, Santa Fe
Comm. of Pub. Lands, Santa Fe
Micrographics 943B-1
Fluids Section FRAH
File: Rosa Unit POD
O&G Chron

015:RBartel:tt:6/5/85:0765M

State of New Mexico



Handwritten signature and initials, possibly 'JL 33'.

Commissioner of Public Lands

June 5, 1985

P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148
Express Mail Delivery Uses
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

JIM BACA
COMMISSIONER

Northwest Pipeline Corporation
P. O. Box 1526
Salt Lake City, Utah 84110-1526

Re: Rosa Unit
Supplemental 1985 Drilling Program
Rio Arriba County, New Mexico

ATTENTION: Mr. Darrell L. Gillen

Gentlemen:

The Commissioner of Public Lands has this date approved your Supplemental 1985 Drilling Program for the Rosa Unit Area, Rio Arriba County, New Mexico. Such Supplemental plan proposes to add the Unit Well No. 129 to test the Mesaverde formation to be located in the W/2 of Section 34, Township 32 North, Range 6 West. Our approval is subject to like approval by the New Mexico Oil Conservation Division and the Bureau of Land Management.

Enclosed is an approved copy for your files.

Very truly yours,

JIM BACA
COMMISSIONER OF PUBLIC LANDS

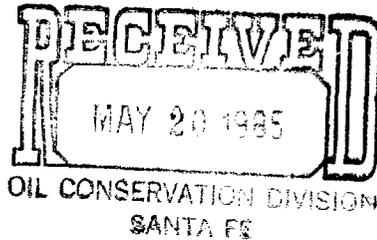
BY: *Jay S. Graham*
RAY D. GRAHAM, Director
Oil and Gas Division
AC 505/827-5744

JB/RDG/pm
encls.

cc: OCD-Santa Fe, New Mexico
BLM-Albuquerque, New Mexico Attn: Fluids Branch
BLM-Roswell, New Mexico Attn: Mr. Armando Lopez

NORTHWEST PIPELINE CORPORATION
ONE OF THE WILLIAMS COMPANIES

LAND DEPARTMENT



343-85

P.O. BOX 1526
SALT LAKE CITY, UTAH 84110-1526
801 584-7215

May 16, 1985

Assistant Area Oil and Gas Supervisor
Bureau of Land Management
Western National Bank Building
505 Marquette NW, Suite 815
Albuquerque, NM 87102

State of New Mexico
Commissioner of Public Lands
Attn: Mr. Ray D. Graham
P. O. Box 1148
Santa Fe, NM 87501

State of New Mexico
Oil Conservation Commission
Attn: Richard L. Stamets
P. O. Box 2088
Santa Fe, NM 87501

Re: Rosa Unit I Sec. No. 587
Rio Arriba County, New Mexico
Supplemental 1985 Drilling Program

Gentlemen:

By letter dated March 29, 1985, Northwest Pipeline Corporation, as Unit Operator, filed a Drilling Program for the captioned Unit for the Calendar Year 1985.

James Fullerton has requested that the following well be added to the 1985 Drilling Program.

WELL NUMBER

LOCATION/DEDICATION

#129 Mesaverde

W/2 Sec. 34-T 32N - R6W

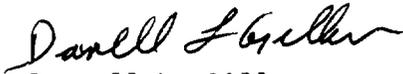
If this 1985 Supplemental Drilling Program is acceptable, please signify your approval in the space provided and return one (1) copy to this office.

#133

Assistant Area Oil and Gas Supervisor
Commissioner of Public Lands
Oil Conservation Commission
May 16, 1985
Page -2-

Copies of this 1985 Supplemental Drilling Program are being sent to the Working Interest Owners shown on the enclosed sheet.

Sincerely,


Darrell L. Gillen
Land Coordinator

DLG:js

Enclosure

cc: Working Interest Owners

APPROVED _____ Date _____
Assistant Area Oil and Gas Supervisor
Minerals Management Service
Subject to like approval by the
Commissioner of Public Lands and the
Oil Conservation Commission

APPROVED _____ Date _____
Commissioner of Public Lands
Subject to like approval by the
Assistant Area Oil and Gas Supervisor
and the Oil Conservation Commission

APPROVED _____ Date _____
Oil Conservation Commission
Subject to like approval by the
Assistant Area Oil and Gas Supervisor
and the Commissioner of Public Lands

The foregoing approvals are for the 1985 Supplemental Drilling Program for the Rosa Unit, Well No. 129.

ROSA UNIT
WORKING INTEREST OWNERS

The Wiser Oil Company
905 Oil and Gas Building
Wichita Falls, Texas 76301

Mr. William G. Webb
4200 Republic Bank Tower
Dallas, Texas 75201

El Paso Exploration Co.
Attention: James R. Permenter
P. O. Box 1492
El Paso, TX 79978

Phillips Petroleum Co.
Attention: T. C. Doughty
8055 E. Tufts Avenue Parkway
Denver, Colorado 80237

Elizabeth T. Calloway
4801 St. Johns Drive
Dallas, Texas 75205

John L. Turner
800 Diamond Shamrock Tower
Dallas, Texas 75201

Mercantile National Bank of Dallas
Trustee, Mary Frances Turner, Jr.
Personal Trust Department
P. O. Box 225415
Dallas, Texas 75265

Ms. Lois J. Willard
P. O. Box 5205
Santa Fe, NM 87501

Mitchell Energy Corporation
Attn: Mr. Jerry Taylor
1670 Broadway - Suite 3200
Amoco Building
Denver, CO 80202

Amoco Production Company
Western Division, Production Mgr.
1670 Broadway
Denver, CO 80202

J. Glenn Turner, Jr.
1700 Mercantile Bank Building
Dallas, TX 75201

Fred E. Turner
One Energy Square - Suite 852
4925 Greenville Avenue
Dallas, TX 75206

Mr. Frank A. Schultz
730 Fidelity Union Tower
Dallas, TX 75201

Winifred K. Ponder
1800 North Stanton Street
El Paso, TX 79902

Coastal Oil & Gas Corporation
Attn: Mgr., Joint Interest Oper
P. O. Box 749
600 - 17th Street, Suite 800 S.
Denver, CO 80201

0043t



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

#133

TONEY ANAYA
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

May 13, 1985

Northwest Pipeline Corporation
P.O. Box 1526
Salt Lake City, Utah 84110-1526

Attention: Darrell L. Gillen

Re: Rosa Unit I Sec. 587
San Juan and Rio Arriba
Counties, New Mexico

APPLICATION FOR APPROVAL OF THE ELEVENTH EXPANDED
PARTICIPATING AREA - Mesaverde Formation - Effective
April 1, 1981

APPLICATION FOR APPROVAL OF THE TWELFTH EXPANDED
PARTICIPATING AREA - Mesaverde Formation -
Effective June 1, 1981

APPLICATION FOR APPROVAL OF THE THIRTEENTH EXPANDED
PARTICIPATING AREA - Mesaverde Formation -
Effective October 1, 1981

APPLICATION FOR APPROVAL OF THE FOURTEENTH EXPANDED
PARTICIPATING AREA - Mesaverde Formation
Effective December 1 1981

Dear Mr. Gillen:

The above referenced submittal has been approved by the New Mexico Oil Conservation Division effective this date. Such approval is contingent upon like approval by the New Mexico Commissioner of Public Lands and the Bureau of Land Management.

Sincerely,

A handwritten signature in black ink, appearing to read "Roy E. Johnson". The signature is fluid and cursive, with a large initial "R" and "J".

ROY E. JOHNSON
Senior Petroleum Geologist

REJ/dp

cc: Commissioner of Public Lands - Santa Fe
Bureau of Land Management - Albuquerque
OCD District Office - Aztec

NORTHWEST PIPELINE CORPORATION 
ONE OF THE WILLIAMS COMPANIES

LAND DEPARTMENT

P.O. BOX 1526
SALT LAKE CITY, UTAH 84110-1526
801-584-7215

April 18, 1985

32-85

Assistant Area Oil and Gas Supervisor
Bureau of Land Management
Western National Bank Building
505 Marquette NW, Suite 815
Albuquerque, New Mexico 87102

State of New Mexico
Commissioner of Public Lands
Attention: Mr. Ray D. Graham
P. O. Box 1148
Santa Fe, New Mexico 87501

State of New Mexico
Oil Conservation Commission
Attention: Mr. Richard L. Stamets
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Rosa Unit I Sec. 587
San Juan & Rio Arriba Counties, New Mexico

APPLICATION FOR APPROVAL OF THE ELEVENTH EXPANDED PARTICIPATING AREA
Mesaverde Formation
Effective April 1, 1981

APPLICATION FOR APPROVAL OF THE TWELFTH EXPANDED PARTICIPATING AREA
Mesaverde Formation
Effective June 1, 1981

APPLICATION FOR APPROVAL OF THE THIRTEENTH EXPANDED PARTICIPATING AREA
Mesaverde Formation
Effective October 1, 1981

APPLICATION FOR APPROVAL OF THE FOURTEENTH EXPANDED PARTICIPATING AREA
Mesaverde Formation
Effective December 1, 1981

Gentlemen:

Pursuant to the provisions of Section 10 of the Rosa Unit Agreement I Sec. No. 587, approved January 24, 1948, NORTHWEST PIPELINE CORPORATION, as Unit Operator, hereby respectfully requests approval of the captioned Participating

Areas for the Mesaverde Formation, to wit:

ELEVENTH EXPANDED PARTICIPATING AREA - Effective April 1, 1981

<u>Description of Lands</u>	<u>No. of Acres</u>	<u>Well Name</u>
W/2 Sec. 22-T31N-R6W	320.00	Rosa Unit No. 79
S/2 Sec. 8-T31N-R5W	320.00	Rosa Unit No. 80

The proposed Eleventh Expanded Participating Area is predicated upon the determination by NORTHWEST PIPELINE CORPORATION, as Unit Operator, that the Rosa Unit No. 79 and 80 Wells are capable of producing unitized substances in paying quantities from the Mesaverde Formation. The well data is as follows:

The Rosa Unit #79 well is located 1800 feet from the south line and 1780 feet from the west line, Section 22, Township 31 North, Range 6 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on December 5, 1980 and completed on March 6, 1981. The Mesaverde Formation was perforated with 30 holes between the following depths:

5282' - 5712'

These perforations were sand/water fractured. This well has two tubing strings. The well was shut-in with a SIPT of 1070 psig and SIPC of 1071 psig. On March 6, 1981 the well was tested and after flowing for three hours through a 3/4 inch variable choke on the 1 1/2 inch tubing, the well gauged 1949 Mcf/D with a calculated AOF of 5680 Mcf/D.

The Rosa Unit #80 well is located 1660 feet from the south line and 1789 feet from the west line, Section 8, Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on November 22, 1980 and completed on March 19, 1981. The Mesaverde formation was perforated with 30 holes between the following depths:

5376' - 5724'

These perforations were treated with 500 gallons of HCl followed by sand/water fracturing. This well has two tubing strings. The well was shut-in with a SIPT of 1183 psig and SIPC of 1184 psig. On March 19, 1981 the well was tested and after flowing for three hours through a 3/4 inch variable choke on the 1 1/2 inch tubing, the well gauged 2155 Mcf/D with a calculated AOF of 5645 Mcf/D.

TWELFTH EXPANDED PARTICIPATING AREA - June 1, 1981

<u>Description of Lands</u>	<u>No. of Acres</u>	<u>Well Name</u>
S/2 Sec. 33-T31N-R5W	320.00	Rosa Unit No. 77

The proposed Twelfth Expanded Participating Area is predicated upon the determination by NORTHWEST PIPELINE CORPORATION, as Unit Operator, that the Rosa Unit No. 77 well is capable of producing unitized substances in paying quantities from the Mesaverde Formation. The well data is as follows:

The Rosa Unit #77 well is located 1820 feet from the south line and 810 feet from the west line, Section 33, Township 31 North, Range 5 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on November 5, 1980 and completed on May 5, 1981 in the Mesaverde Formation at a plug back depth of 8125'.

The Mesaverde formation was perforated with 27 holes between the following depths:

5562'-5938'

These perforations were treated with 1000 gallons 7 1/2% HCl followed by a sand/water fracturing. The well was shut-in on April 20, 1981 for fifteen days with a SIPT of 1089 psig and SIPC of 1094 psig. On May 5, 1981 the well was tested and after flowing for three hours through a 3/4 inch variable choke on the 1 1/4 inch tubing, the well gauged 1719 Mcf/D with a calculated AOF of 4777 Mcf/D.

THIRTEENTH EXPANDED PARTICIPATING AREA - Effective October 1, 1981

<u>Description of Lands</u>	<u>No. of Acres</u>	<u>Well Name</u>
All Sec. 34-T32N-R6W	640.00	Rosa Unit No. 89
All Sec. 35-T32N-R6W	640.00	Rosa Unit No. 91

The proposed Thirteenth Expanded Participating Area is predicated upon the determination by NORTHWEST PIPELINE CORPORATION, as Unit Operator, that the Rosa Unit No. 89 and 91 wells are capable of producing unitized substances in paying quantities from the Mesaverde Formation. The well data is as follows:

The Rosa Unit #89 well is located 565 feet from the north line and 625 feet from the east line, Section 34, Township 32 North, Range 6 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on August 1, 1981 and completed on September

1, 1981 in the Mesaverde Formation at a plug back depth of 6058'. The Mesaverde Formation was perforated with 22 holes between the depths:

5762'-6042'

These perforations were treated with 1000 gallons of 7 1/2 HCl followed by a sand/water fracturing. The well was shut-in on August 25, 1981, for eight days with SIPT of 911 psig and SIPC of 915 psig. On September 1, 1981 the well was tested and after flowing for three hours through a 2 x .750 inch variable choke on the 2 3/8 inch tubing, the well gauged 3266 Mcf/D with a calculated AOF of 5401 Mcf/D.

The Rosa Unit #91 well is located 1630 feet from the north line and 970 from the east line, Section 35, Township 32 North, Range 6 West, N.M.P.M., Rio Arriba County, New Mexico. This well was spudded on July 15, 1981 and completed on September 4, 1981 in the Mesaverde Formation at a plug back depth of 6040'. the Mesaverde Formation was perforated with 23 holes between the depths:

5630'-5989'

These perforations were treated with 1750 gallons of 7 1/2% HCl followed by a sand/water fracturing. The well was shut-in on August 29, 1981 for nine days with a SIPT of 1018 psig and SIPC of 1018 psig. On September 4, 1981 the well was tested and after flowing for three hours through a 2 x .750 inch variable choke on the 2 3/8 inch tubing, the well gauged 3050 Mcf/D with a calculated AOF of 4115 Mcf/D.

FOURTEENTH EXPANDED PARTICIPATING AREA - Effective December 1, 1981

<u>Description of Lands</u>	<u>No. of Acres</u>	<u>Well Name</u>
N/2 Sec. 20-T31N-R5W	320.00	Rosa Unit No. 85
SW/4 Sec. 8-T31N-R6W	160.00	Rosa Unit No. 88

The proposed Fourteenth Expanded Participating Area is predicated upon the determination by NORTHWEST PIPELINE CORPORATION, as Unit Operator, that the Rosa Unit No. 85 and 88 wells are capable of producing unitized substances in paying quantities from the Mesaverde Formation. The well data is as follows:

The Rosa Unit #85 well is located 800 feet from the north line and 990 feet from the east line, Section 20, Township 31 North,

Range 5 West, N.M.P.M., Rio Arriba county, New Mexico. This well was spudded on July 2, 1981 and completed on November 3, 1981. The Mesaverde Formation was perforated with 37 holes between the following depths:

5545'-5892'

These perforations were treated with 10,000 gallons of pad water followed by sand/water fracturing. This well has one tubing string. The well was shut-in with a SIPT of 1112 psig and SIPC of 1113 psig. On November 30, 1981 the well was tested and after flowing for three hours through a 3/4 inch variable choke on the 2 3/8 tubing, the well gauged 2024 Mcf/D with a calculated AOF of 5589 Mcf/D.

The Rosa Unit #88 well is located 1610 feet from the north line and 1100 feet from the west line of Section 8, Township 31 North, Range 6 West, N.M.P.M., San Juan County, New Mexico. This well was spudded on August 9, 1981 and completed on November 3, 1981. The Mesaverde Formation was perforated with 20 holes between the following depths:

5321'-5676'

These perforations were treated with 73,100 gallons of slick water followed by sand/water fracturing. This well has one tubing string. The well was shut-in with SIPT Of 1169 psig. On November 13, 1981 the well was tested and after flowing for three hours through a 3/4 inch variable choke on the 2 3/8 inch tubing, the well gauged 2920 Mcf/D with a calculated AOF of 3306 Mcf/D.

In support of this application, the following listed exhibits are made a part hereof:

EXHIBIT "A"

Ownership map reflecting the boundaries of the Unit and the proposed Mesaverde Participating Areas with the Rosa Unit.

EXHIBIT "B"

Geologic Report on the proposed Participating Areas within the Rosa Unit.

Bureau of Land Management
Commissioner of Public Lands
Oil Conservation Commission
Page 6
April 18, 1985

EXHIBIT "C"

Figure No. 1: Structure Map
Figure No. 2: Net Sand Thickness Map Upper Dakota Sand

EXHIBIT "D"

Rosa Unit Production Schedule

Attached hereto are Schedules XI, XII, XIII and XIV showing the proposed Mesaverde Participating Areas. These schedules describe the Participating Areas, show the percentage of unitized substances allocated to each unitized tract, and the percentage of ownership in the tracts.

If the proposed Participating Areas set forth herein meet with your approval, please indicate such approval in the space provided on the attached sheet and return an approved copy for our files.

Copies of this letter, exhibits and schedules are being sent to the Working Interest Owners shown on the attached sheet.

Very truly yours,



Darrell L. Gillen
Land Coordinator

DLG:js
Attachments

cc: Working Interest Owners

Minerals Management Service
Commissioner of Public Lands
Oil Conservation Commission
Page 7
April 18, 1985

APPROVED _____
Assistant Area Oil and Gas Supervisor
Subject to like approval by the
Commissioner of Public Lands and the
Oil Conservation Commission

DATE _____

APPROVED _____
Commissioner of Public Lands
Subject to like approval by the
Assistant Area Oil and Gas Supervisor
and the Oil Conservation Commission

DATE _____

APPROVED 
Oil Conservation Commission
Subject to like approval by the
Assistant Area Oil and Gas Supervisor
and the Commissioner of Public Lands

DATE 5-13-85

The foregoing are approvals for the ELEVENTH, TWELFTH, THIRTEENTH and
FOURTEENTH EXPANDED PARTICIPATING AREAS in the Mesaverde Formation in the Rosa
Unit.

ROSA UNIT
WORKING INTEREST OWNERS

The Wiser Oil Company
905 Oil and Gas Building
Wichita Falls, TX 76301

Mr. William G. Webb
1700 Mercantile Bank Building
Dallas, TX 75201

El Paso Exploration Co.
P. O. Box 4289
Farmington, NM 87401

Phillips Petroleum Co.
Attn: T. C. Doughty
8055 E. Tufts Avenue Parkway
Denver, CO 80237

Elizabeth T. Calloway
4801 St. Johns Drive
Dallas, TX 75205

John L. Turner
800 Diamond Shamrock Tower
Dallas, TX 75201

Mercantile National Bank a Dallas
Trustee, Mary Frances Turner, Jr.
Personal Trust Department
Dallas, TX 75265

Gas Producing Enterprises, Inc.
Attn: North Region-Land Department
2100 Prudential Plaza
P. O. Box 749
Denver, CO 80201

Ms. Lois J. Willard
P. O. Box 5205
Santa Fe, NM 87501

Mitchell Energy Corporation
Attn: Mr. Jerry Taylor
1670 Broadway - Suite 3200
Amoco Building
Denver, CO 80202

Amoco Production Company
Attn: J. C. Burnside
1670 Broadway - Suite 1914
Amoco Building
Denver, CO 80202

J. Glenn Turner, Jr.
1700 Mercantile Bank Building
Dallas, TX 75201

Fred E. Turner
One Energy Square - Suite 852
4925 Greenville Avenue
Dallas, TX 75206

Mr. Frank A. Schultz
730 Fidelity Union Tower
Dallas, TX 75201

Winifred K. Ponder
1800 North Stanton Street
El Paso, TX 79902

Coastal Oil & Gas Corporation
Attn: Mgr., Joint Interest Oper.
P. O. Box 749
600 - 17th St., Suite 800 S.
Denver, CO 80201

SCHEDULE XI
 ELEVENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
 ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 13</u>						
SF-078763	<u>T-31-N, R-5-W</u> Sec. 5: All Sec. 8: NE/4, S/2	847.96	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	5.27702%
<u>TRACT 14</u>						
SF-078767	<u>T-31-N, R-5-W</u> Sec. 6: All Sec. 7: All Sec. 8: NW/4	2518.04	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	15.67025%
	<u>T-31-N, R-6-W</u> Sec. 12: All Sec. 13: Lots 1,2,3,4, W/2, W/2E/2 Sec. 24: Lots 1,2,3,4, W/2, W/2E/2					

SCHEDULE XI
ELEVENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 18</u>						
SF-078764	<u>T-31-N, R-5-W</u> Sec. 18: All Sec. 19: E/2E/2, NW/4NE/4, SW/4SE/4, Lots 1, 4 Sec. 20: SE/4 Sec. 29: N/2NE/4, SW/4, W/2SE/4 Sec. 30: E/2, Lots 1,2,3,4 Sec. 31: E/2, Lots 1,2,3,4	2187.30	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	13.61198%
<u>TRACT 19</u>						
Fee	<u>T-31-N, R-5-W</u> Sec. 19: Lots 2, 3, SW/4NE/4, NW/4SE/4	152.22	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	.94729%
<u>TRACT 20</u>						
Fee	<u>T-31-N, R-5-W</u> Sec. 20: SW/4 Sec. 29: NW/4	320.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	1.99143%

Effective April 1, 1981

SCHEDULE XI
ELEVENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>NUMBER DESCRIPTION</u>	<u>OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 21</u>						
SF-079165	<u>T-31-N, R-5-W</u> Sec. 29: S/2NE/4, E/2SE/4	160.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	.99571%
<u>TRACT 25</u>						
E-347-33	<u>T-31-N, R-5-W</u> Sec. 32: NW/4	160.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 76.562500% 10.937500% <u>100.000000%</u>	12.500000% 76.562500% 10.937500% <u>100.000000%</u>	.99571%
<u>TRACT 26</u>						
E-347-28	<u>T-31-N, R-5-W</u> Sec. 32: NE/4	160.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	.99571%
<u>TRACT 27</u>						
E-347-32	<u>T-31-N, R-5-W</u> Sec. 32: S/2	320.00	Royalty Working Interest El Paso Natural Gas Co. ORRI Total	12.500000% 66.625000% 20.875000% <u>100.000000%</u>	12.500000% 66.625000% 20.875000% <u>100.000000%</u>	1.99142%

Effective April 1, 1981

SCHEDULE XI
 ELEVENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
 ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 29</u>						
SF-078772	<u>T-31-N, R-6-W</u> Sec. 1: All Sec. 3: Lots 5, 6,7,8,9, SE/4, E/2SW/4, SW/4SW/4 Sec. 4: Lots 5, 6,7,8,9, N/2SW/4, NW/4SE/4, SE/4SE/4	1161.86	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	7.23048%
	<u>T-32-N, R-6-W</u> Sec. 33: W/2					
<u>TRACT 30</u>						
E-289-37	<u>T-31-N, R-6-W</u> Sec. 2: Lots 6, 7,8, S/2	346.91	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 85.000000% 2.500000% <u>100.000000%</u>	12.500000% 85.000000% 2.500000% <u>100.000000%</u>	2.15889%
<u>TRACT 31</u>						
Unknown	<u>T-31-N, R-6-W</u> Sec. 2: Lot 5	9.35	Royalty Working Interest L. A. Smith ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	00.000000% 00.000000% 00.000000% <u>00.000000%</u>	0.00000%

Effective April 1, 1981

SCHEDULE XI
ELEVENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 32</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 3 & 4 a portion thereof designated as Tract 37	38.12	Royalty Working Interest T. H. McElvain, et al ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	00.000000% 00.000000% <u>00.000000%</u> <u>00.000000%</u>	0.000000%
<u>TRACT 33</u>						
SF-078765	<u>T-31-N, R-6-W</u> Sec. 4: S/2SW/4, SW/4SE/4 Sec. 5: A11 Sec. 8: NW/4, E/2NE/4 Sec. 9: A11 Sec. 10: Lots 1,2,3, E/2E/2, NW/4 Sec. 15: Lots 1,2, E/2SW/4, E/2	2220.23	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	13.81691%
<u>TRACT 34</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 8: W/2NE/4	80.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	.49786%

Effective April 1, 1981

SCHEDULE XI
ELEVENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 35</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 10: W/2E/2	160.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	.99571%
<u>TRACT 36</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 10: Tract 38 Sec. 15: Tract 38	161.52	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 82.031250% <u>5.468750%</u> <u>100.000000%</u>	12.500000% 82.031250% <u>5.468750%</u> <u>100.000000%</u>	1.00517%
<u>TRACT 37</u>						
SF-078771	<u>T-31-N, R-6-W</u> Sec. 11: All Sec. 14: All Sec. 23: All Sec. 26: All	2560.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	15.93138%
<u>TRACT 38</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 15: Tract 39	80.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	.49786%

Effective April 1, 1981

SCHEDULE XI
ELEVENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 39</u>						
SF-078766	<u>T-31-N, R-6-W</u> Sec. 22: E/2 Sec. 25: W/2, W/2E/2, Lots 1, 2,3,4 Sec. 22: W/2	1184.48	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% 100.000000%	12.500000% 87.500000% 00.000000% 100.000000%	7.37124%
<u>TRACT 43</u>						
E-289-31	<u>T-31-N, R-6-W</u> Sec. 15: out of S/2S/2SW/4SW/4	8.41	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 82.500000% 5.000000% 100.000000%	12.500000% 82.500000% 5.000000% 100.000000%	.05234%
<u>TRACT 44</u>						
E-504-11	<u>T-32-N, R-6-W</u> Sec. 32: W/2	320.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 84.500000% 3.000000% 100.000000%	12.500000% 84.500000% 3.000000% 100.000000%	1.99141%

Effective April 1, 1981

SCHEDULE XI
ELEVENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 45</u>						
E-504-13	<u>T-32-N, R-6-W</u> Sec. 32: E/2	320.00	Royalty	12.500000%	12.500000%	1.99141%
			Working Interest			
			El Paso Natural Gas Co.	65.625000%	65.625000%	
			ORRI	<u>21.875000%</u>	<u>21.875000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 47</u>						
E-346-19	<u>T-32-N, R-6-W</u> Sec. 36: W/2	320.00	Royalty	12.500000%	12.500000%	1.99141%
			Working Interest			
			Northwest Pipeline Corp.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 48</u>						
E-346-24	<u>T-32-N, R-6-W</u> Sec. 36: E/2	320.00	Royalty	12.500000%	12.500000%	1.99141%
			Working Interest			
			El Paso Natural Gas Co.	65.625000%	65.625000%	
			ORRI	<u>21.875000%</u>	<u>21.875000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

Effective April 1, 1981

SCHEDULE XI
ELEVENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

RECAPITULATION

Description of Lands in Participating Area

Township 31 North, Range 5 West, N.M.P.M.

Sec. 20: S/2

Sec. 5,6,7,8,18,19,29,30,31,32: All

Township 31 North, Range 6 West, N.M.P.M.

Sec. 8: N/2

Sec. 1,2,*3,*4,5,9,10,11,12,13,14,15,22,23,24,25,26: All

Township 32 North, Range 6 West, N.M.P.M.

Sec. 33: W/2

Sec. 32,36: All

Total Number of Acres in Participating Area 16,116.40

Total Number of Committed Acres in Participating Area 16,068.93

*Portion of this acreage not committed to unit.

Effective April 1, 1981

SCHEDULE XII
TWELFTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 13</u>						
SF-078763	<u>T-31-N, R-5-W</u> Sec. 5: All Sec. 8: NE/4, S/2	847.96	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	5.17397%
<u>TRACT 14</u>						
SF-078767	<u>T-31-N, R-5-W</u> Sec. 6: All Sec. 7: All Sec. 8: NW/4	2518.04	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	15.36427%
<u>T-31-N, R-6-W</u> Sec. 12: All Sec. 13: Lots 1,2, 3,4, W/2, W/2E/2 Sec. 24: Lots 1,2, 3,4, W/2, W/2E/2						
<u>TRACT 18</u>						
SF-078764	<u>T-31-N, R-5-W</u> Sec. 18: All Sec. 19: E/2E/2, NW/4NE/4, SW/4SE/4 Lots 1,4 Sec. 20: SE/4 Sec. 29: N/2NE/4, SW/4, W/2SE/4 Sec. 30: E/2, Lots 1,2,3,4 Sec. 31: Lots 1,2, 3,4, E/2	2187.30	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	13.34620%

SCHEDULE XII
TWELFTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 19</u>						
Fee	<u>T-31-N, R-5-W</u> Sec. 19: Lots 2, 3, SW/4NE/4, NW/4SE/4	152.22	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	.92880%
<u>TRACT 20</u>						
Fee	<u>T-31-N, R-5-W</u> Sec. 20: SW/4 Sec. 29: NW/4	320.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	1.95254%
<u>TRACT 21</u>						
SF-079165	<u>T-31-N, R-5-W</u> Sec. 29: S/2NE/4, E/2SE/4	160.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	.97627%
<u>TRACT 25</u>						
E-347-33	<u>T-31-N, R-5-W</u> Sec. 32: NW/4	160.00	Royalty Working Interest El Paso Natural Gas Co. ORRI Total	12.500000% 76.562500% <u>10.937500%</u> <u>100.000000%</u>	12.500000% 76.562500% <u>10.937500%</u> <u>100.000000%</u>	.97627%

SCHEDULE XII
TWELFTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 26</u>						
E-347-28	<u>T-31-N, R-5-W</u> Sec. 32: NE/4	160.00	Royalty	12.500000%	12.500000%	.97627%
			Working Interest			
			Northwest Pipeline Corp.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 27</u>						
E-347-32	<u>T-31-N, R-5-W</u> Sec. 32: S/2	320.00	Royalty	12.500000%	12.500000%	1.95254%
			Working Interest			
			El Paso Natural Gas Co.	66.625000%	66.625000%	
			ORRI	<u>20.875000%</u>	<u>20.875000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 28</u>						
SF-078773	<u>T-31-N, R-5-W</u> Sec. 33: S/2	320.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	43.750000%	43.250000%	.97627%
			Amoco	43.750000%	43.750000%	.97627%
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 29</u>						
SF-078772	<u>T-31-N, R-6-W</u> Sec. 1: All Sec. 3: Lots 5, 6,7,8,9, SE/4, E/2SW/4, SW/4SW/4 Sec. 4: Lots 5,6, 7,8,9, N/2SW/4, NW/4SE/4, SE/4SE/4	1161.86	Royalty	12.500000%	12.500000%	7.08930%
			Working Interest			
			Northwest Pipeline Co.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
	<u>T-32-N, R-6-W</u> Sec. 33: W/2					

SCHEDULE XII
TWELFTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 30</u>						
E-289-37	<u>T-31-N, R-6-W</u> Sec. 2: Lots 6, 7,8, S/2	346.91	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 85.000000% 2.500000% <u>100.000000%</u>	12.500000% 85.000000% 2.500000% <u>100.000000%</u>	2.11673%
<u>TRACT 31</u>						
Unknown	<u>T-31-N, R-6-W</u> Sec. 2: Lot 5	9.35	Royalty Working Interest L. A. Smith ORRI Total	12.500000% . 87.500000% <u>00.000000%</u> <u>100.000000%</u>	00.000000% 00.000000% <u>00.000000%</u> <u>00.000000%</u>	.00000%
<u>TRACT 32</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 3 & 4 a portion thereof designated as Tract 37	38.12	Royalty Working Interest T. H. McElvain, et al ORRI Total	12.500000% . 87.500000% <u>00.000000%</u> <u>100.000000%</u>	00.000000% 00.000000% <u>00.000000%</u> <u>00.000000%</u>	.00000%
<u>TRACT 33</u>						
SF-078765	<u>T-31-N, R-6-W</u> Sec. 4: S/2SW/4, SW/4SE/4 Sec. 5: All Sec. 8: NW/4, E/2NE/4 Sec. 9: All Sec. 10: Lots 1, 2,3, E/2E/2, NW/4 Sec. 15: Lots 1,2 E/2SW/4, E/2	2220.23	Royalty Working Interest Northwest Pipeline Co. ORRI Total	12.500000% 87.500000% . <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% . <u>00.000000%</u> <u>100.000000%</u>	13.54713%

SCHEDULE XII
TWELFTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 34</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 8: W/2NE/4	80.00	Royalty	12.500000%	12.500000%	.48813%
			Working Interest			
			Northwest Pipeline Corp.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 35</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 10: W/2E/2	160.00	Royalty	12.500000%	12.500000%	.97627%
			Working Interest			
			Northwest Pipeline Corp.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 36</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 10: Tract 38 Sec. 15: Tract 38	161.52	Royalty	12.500000%	12.500000%	.98554%
			Working Interest			
			Northwest Pipeline Corp.	82.031250%	82.031250%	
			ORRI	<u>5.468750%</u>	<u>5.468750%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 37</u>						
SF-078771	<u>T-31-N, R-6-W</u> Sec. 11: All Sec. 14: All Sec. 23: All Sec. 26: All	2560.00	Royalty	12.500000%	12.500000%	15.62030%
			Working Interest			
			Northwest Pipeline Corp.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XII
TWELFTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 38</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 15: Tract 39	80.00	Royalty	12.500000%	12.500000%	.48813%
			Working Interest			
			Northwest Pipeline Corp.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 39</u>						
SF-078766	<u>T-31-N, R-6-W</u> Sec. 22: E/2 Sec. 25: W/2, W/2E/2, Lots 1, 2,3,4 Sec. 22: W/2	1184.48	Royalty	12.500000%	12.500000%	7.22732%
			Working Interest			
			Northwest Pipeline Corp.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 43</u>						
E-289-31	<u>T-31-N, R-6-W</u> Sec. 15: out of S/2S/2 SW/4SW/4	8.41	Royalty	12.500000%	12.500000%	.05132%
			Working Interest			
			Northwest Pipeline Corp.	82.500000%	82.500000%	
			ORRI	<u>5.000000%</u>	<u>5.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 44</u>						
E-504-11	<u>T-32-N, R-6-W</u> Sec. 32: W/2	320.00	Royalty	12.500000%	12.500000%	1.95254%
			Working Interest			
			Northwest Pipeline Corp.	84.500000%	84.500000%	
			ORRI	<u>3.000000%</u>	<u>3.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XII
TWELFTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 45</u>						
E-504-13	<u>T-32-N, R-6-W</u> Sec. 32: E/2	320.00	Royalty	12.500000%	12.500000%	1.95254%
			Working Interest			
			El Paso Natural Gas Co.	65.625000%	65.625000%	
			ORRI	<u>21.875000%</u>	<u>21.875000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 47</u>						
E-346-19	<u>T-32-N, R-6-W</u> Sec. 36: W/2	320.00	Royalty	12.500000%	12.500000%	1.95254%
			Working Interest			
			Northwest Pipeline Corp.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 48</u>						
E-346-24	<u>T-32-N, R-6-W</u> Sec. 36: E/2	320.00	Royalty	12.500000%	12.500000%	1.95254%
			Working Interest			
			El Paso Natural Gas Co.	65.625000%	65.625000%	
			ORRI	<u>21.875000%</u>	<u>21.875000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XII
TWELFTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

RECAPITULATION

Description of Lands in Participating Area

Township 31 North, Range 5 West, N.M.P.M.

Sec. 20: S/2

Sec. 33: S/2

Sec. 5,6,7,8,18,19,29,30,31,32: All

Township 31 North, Range 6 West, N.M.P.M.

Sec. 8: N/2

Sec. 1,2,*3,*4,5,9,10,11,12,13,14,15,22,23,24,25,26: All

Township 32 North, Range 6 West, N.M.P.M.

Sec. 33: W/2

Sec. 32,36: All

Total Number of Acres in Participating Area 16,436.40

Total Number of Committed Acres in Participating Area 16,388.93

*Portion of this acreage not committed to unit.

SCHEDULE XIII
THIRTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 13</u>						
SF-078763	T-31-N, R-5-W Sec. 5: All Sec. 8: NE/4, S/2	847.96	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	4.81005%
<u>TRACT 14</u>						
SF-078767	T-31-N, R-5-W Sec. 6: All Sec. 7: All Sec. 8: NW/4	2518.04	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	14.28356%
	T-31-N, R-6-W Sec. 12: All Sec. 13: Lots 1,2, 3,4, W/2, W/2E/2 Sec. 24: Lots 1,2, 3,4, W/2, W/2E/2					
<u>TRACT 18</u>						
SF-078764	T-31-N, R-5-W Sec. 18: All Sec. 19: E/2E/2, NW/4NE/4, SW/4SE/4, Lots 1,4 Sec. 20: SE/4 Sec. 29: N/2NE/4, SW/4, W/2SE/4 Sec. 30: E/2, Lots 1,2,3,4 Sec. 31: E/2, Lots 1,2,3,4	2187.30	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.40745%

SCHEDULE XIII
THIRTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 19</u>						
Fee	<u>T-31-N, R-5-W</u> Sec. 19: Lots 2,3 SW/4NE/4, NW/4SE/4	152.22	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	.86347%
<u>TRACT 20</u>						
Fee	<u>T-31-N, R-5-W</u> Sec. 20: SW/4 Sec. 29: NW/4	320.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	1.81518%
<u>TRACT 21</u>						
SF-079165	<u>T-31-N, R-5-W</u> Sec. 29: S/2NE/4, E/2SE/4	160.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	.90760%
<u>TRACT 25</u>						
E-347-33	<u>T-31-N, R-5-W</u> Sec. 32: NW/4	160.00	Royalty Working Interest El Paso Natural Gas Co. ORRI Total	12.500000% 76.562500% 10.937500% <u>100.000000%</u>	12.500000% 76.562500% 10.937500% <u>100.000000%</u>	.90760%
<u>TRACT 26</u>						
E-347-28	<u>T-31-N, R-5-W</u> Sec. 32: NE/4	160.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	.90760%

SCHEDULE XIII
THIRTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 27</u>						
E-347-32	<u>T-31-N, R-5-W</u> Sec. 32: S/2	320.00	Royalty Working Interest El Paso Natural Gas Co. ORRI Total	12.500000% 66.625000% 20.875000% <u>100.000000%</u>	12.500000% 66.625000% 20.875000% <u>100.000000%</u>	1.81520%
<u>TRACT 28</u>						
SF-078773	<u>T-31-N, R-5-W</u> Sec. 33: S/2	320.00	Royalty Working Interest Northwest Pipeline Corp. Amoco ORRI Total	12.500000% 43.750000% 43.750000% 00.000000% <u>100.000000%</u>	12.500000% 43.750000% 43.750000% 00.000000% <u>100.000000%</u>	.90760% .90760%
<u>TRACT 29</u>						
SF-078772	<u>T-31-N, R-6-W</u> Sec. 1: All Sec. 3: Lots 5,6, 7,8,9, SE/4, E/2SW/4, SW/4SW/4 Sec. 4: Lots 5, 6,7,8,9, N/2SW/4, NW/4SE/4, SE/4SE/4	1161.86	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	6.59064%
	<u>T-32-N, R-6-W</u> Sec. 33: W/2					
	Sec. 34: E/2, E/2 W/2, SW/4SW/4 Sec. 35: All	1160.00	Royalty Working Interest Northwest Pipeline Corp. Amoco ORRI Total	12.500000% 43.750000% 43.750000% 00.000000% <u>100.000000%</u>	12.500000% 43.750000% 43.750000% 00.000000% <u>100.000000%</u>	3.29005% 3.29005%
<u>TRACT 30</u>						
E-289-37	<u>T-31-N, R-6-W</u> Sec. 2: Lots 6,7,8, S/2	346.91	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 85.000000% 2.500000% <u>100.000000%</u>	12.500000% 85.000000% 2.500000% <u>100.000000%</u>	1.96784%

SCHEDULE XIII
THIRTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 31</u>						
Unknown	<u>T-31-N, R-6-W</u> Sec. 2: Lot 5	9.35	Royalty Working Interest L. A. Smith ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	00.000000% 00.000000% 00.000000% <u>00.000000%</u>	.00000%
<u>TRACT 32</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 3 & 4 a portion thereof designated as Tract 37	38.12	Royalty Working Interest T. H. McElvain, et al ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	00.000000% 00.000000% 00.000000% <u>00.000000%</u>	.00000%
Fee	<u>T-32-N, R-6-W</u> Sec. 34: NW/4SW/4	40.00	Royalty Working Interest T. H. McElvain, et al ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	.00000%
<u>TRACT 33</u>						
SF-078765	<u>T-31-N, R-6-W</u> Sec. 4: S/2SW/4, SW/4SE/4 Sec. 5: A11 Sec. 8: NW/4, E/2NE/4 Sec. 9: A11 Sec. 10: Lots 1,2, 3, E/2E/2, NW/4 Sec. 15: Lots 1,2, E/2SW/4, E/2	2220.23	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.59424%
<u>TRACT 34</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 8: W/2NE/4	80.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	.45380%

SCHEDULE XIII
THIRTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 35</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 10: W/2E/2	160.00	Royalty	12.500000%	12.500000%	.90760%
			Working Interest			
			Northwest Pipeline Corp.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 36</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 10: Tract 38 Sec. 15: Tract 38	161.52	Royalty	12.500000%	12.500000%	.91622%
			Working Interest			
			Northwest Pipeline Corp.	82.031250%	82.031250%	
			ORRI	<u>5.468750%</u>	<u>5.468750%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 37</u>						
SF-078771	<u>T-31-N, R-6-W</u> Sec. 11: All Sec. 14: All Sec. 23: All Sec. 26: All	2560.00	Royalty	12.500000%	12.500000%	14.52158%
			Working Interest			
			Northwest Pipeline Corp.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 38</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 15: Tract 39	80.00	Royalty	12.500000%	12.500000%	.45380%
			Working Interest			
			Northwest Pipeline Corp.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XIII
THIRTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 39</u>						
SF-078766	<u>T-31-N, R-6-W</u> Sec. 22: E/2 Sec. 25: W/2, W/2E/2, Lots 1, 2,3,4 Sec. 22: W/2	1184.48	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	6.71896%
<u>TRACT 43</u>						
E-289-31	<u>T-31-N, R-6-W</u> Sec. 15: out of S/2S/2SW/4SW/4	8.41	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 82.500000% <u>5.000000%</u> <u>100.000000%</u>	12.500000% 82.500000% <u>5.000000%</u> <u>100.000000%</u>	.04771%
<u>TRACT 44</u>						
E-504-11	<u>T-32-N, R-6-W</u> Sec. 32: W/2	320.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 84.500000% <u>3.000000%</u> <u>100.000000%</u>	12.500000% 84.500000% <u>3.000000%</u> <u>100.000000%</u>	1.81520%
<u>TRACT 45</u>						
E-504-13	<u>T-32-N, R-6-W</u> Sec. 32: E/2	320.00	Royalty Working Interest El Paso Natural Gas Co. ORRI Total	12.500000% 65.625000% <u>21.875000%</u> <u>100.000000%</u>	12.500000% 65.625000% <u>21.875000%</u> <u>100.000000%</u>	1.81520%

SCHEDULE XIII
THIRTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 46</u>						
Fee	<u>T-32-N, R-6-W</u> Sec. 34: W/2 NW/4	80.00	Royalty	12.500000%	12.500000%	
			Working Interest			
			Northwest Pipeline Corp.	43.750000%	43.750000%	.22690%
			Amoco	43.750000%	43.750000%	.22690%
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 47</u>						
E-346-19	<u>T-32-N, R-6-W</u> Sec. 36: W/2	320.00	Royalty	12.500000%	12.500000%	1.81520%
			Working Interest			
			Northwest Pipeline Corp.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 48</u>						
E-346-24	<u>T-32-N, R-6-W</u> Sec. 36: E/2	320.00	Royalty	12.500000%	12.500000%	1.81520%
			Working Interest			
			El Paso Natural Gas Co.	65.625000%	65.625000%	
			ORRI	<u>21.875000%</u>	<u>21.875000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XIII
THIRTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

RECAPITULATION

Description of Lands in Participating Area

Township 31 North, Range 5 West, N.M.P.M.

Sec. 20: S/2

Sec. 33: S/2

Sec. 5,6,7,8,18,19,29,30,31,32: All

Township 31 North, Range 6 West, N.M.P.M.

Sec. 8: N/2

Sec. 1,2,*3,*4,5,9,10,11,12,13,14,15,22,23,24,25,26: All

Township 32 North, Range 6 West, N.M.P.M.

Sec. 33: W/2

Sec. 32,34,35,36: All

Total Number of Acres in Participating Area 17,716.40

Total Number of Committed Acres in Participating Area 17,628.93

*Portion of this acreage not committed to unit.

SCHEDULE XIV
FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 13</u>						
SF-078763	<u>T-31-N, R-5-W</u> Sec. 5: All Sec. 8: NE/4, S/2	847.96	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	4.68255%
<u>TRACT 14</u>						
SF-078767	<u>T-31-N, R-5-W</u> Sec. 6: All Sec. 7: All Sec. 8: NW/4	2518.04	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	13.90497%

T-31-N, R-6-W
Sec. 12: All
Sec. 13: Lots 1,2,
3,4, W/2, W/2E/2
Sec. 24: Lots 1,2,
3,4, W/2, W/2E/2

SCHEDULE XIV
FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 18</u>						
SF-078764	<u>T-31-N, R-5-W</u> Sec. 18: All Sec. 19: Lots 1,4 E/2E/2, NW/4NE/4, SW/4SE/4 Sec. 20: SE/4 Sec. 29: N/2NE/4, SW/4, W/2SE/4 Sec. 30: E/2, Lots 1,2,3,4 Sec. 31: Lots 1,2,3,4, E/2	2187.30	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.07857%
	Sec. 20: N/2	320.00	Royalty Working Interest Northwest Pipeline Corp. Amoco ORRI Total	12.500000% 43.750000% 43.750000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 43.750000% 43.750000% <u>00.000000%</u> <u>100.000000%</u>	.88355% .88355%
<u>TRACT 19</u>						
Fee	<u>T-31-N, R-5-W</u> Sec. 19: Lots 2, 3, SW/4NE/4, NW/4SE/4	152.22	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	.84059%
<u>TRACT 20</u>						
Fee	<u>T-31-N, R-5-W</u> Sec. 20: SW/4 Sec. 29: NW/4	320.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	1.76708%

SCHEDULE XIV
FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 21</u>						
SF-079165	<u>T-31-N, R-5-W</u> Sec. 29: S/2NE/4, E/2SE/4	160.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	.88354%
<u>TRACT 25</u>						
E-347-33	<u>T-31-N, R-5-W</u> Sec. 32: NW/4	160.00	Royalty Working Interest El Paso Natural Gas Co. ORRI Total	12.500000% 76.562500% <u>10.937500%</u> <u>100.000000%</u>	12.500000% 76.562500% <u>10.937500%</u> <u>100.000000%</u>	.88354%
<u>TRACT 26</u>						
E-347-28	<u>T-31-N, R-5-W</u> Sec. 32: NE/4	160.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	.88354%
<u>TRACT 27</u>						
E-347-32	<u>T-31-N, R-5-W</u> Sec. 32: S/2	320.00	Royalty Working Interest El Paso Natural Gas Co. ORRI Total	12.500000% 66.625000% <u>20.875000%</u> <u>100.000000%</u>	12.500000% 66.625000% <u>20.875000%</u> <u>100.000000%</u>	1.76708%

SCHEDULE XIV
FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 28</u>						
SF-078773	<u>T-31-N, R-5-W</u> Sec. 33: S/2	320.00	Royalty Working Interest Northwest Pipeline Corp. Amoco ORRI Total	12.500000% 43.750000% 43.750000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 43.750000% 43.750000% <u>00.000000%</u> <u>100.000000%</u>	 .88354% .88354%
<u>TRACT 29</u>						
SF-078772	<u>T-31-N, R-6-W</u> Sec. 1: All Sec. 3: Lots 5, 6,7,8,9 SE/4, E/2SW/4, SW/4SW/4 Sec. 4: Lots 5,6, 7,8,9, N/2SW/4, NW/4SE/4, SE/4SE/4	1161.86	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 87.500000% <u>00.000000%</u> <u>100.000000%</u>	6.41595%
	<u>T-32-N, R-6-W</u> Sec. 33: W/2					
	Sec. 34: E/2, E/2 W/2, SW/4 SW/4 Sec. 35: All	1160.00	Royalty Working Interest Northwest Pipeline Corp. Amoco ORRI Total	12.500000% 43.750000% 43.750000% <u>00.000000%</u> <u>100.000000%</u>	12.500000% 43.750000% 43.750000% <u>00.000000%</u> <u>100.000000%</u>	 3.20284% 3.20284%
<u>TRACT 30</u>						
E-289-37	<u>T-31-N, R-6-W</u> Sec. 2: Lots 6, 7,8, S/2	346.91	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 85.000000% <u>2.500000%</u> <u>100.000000%</u>	12.500000% 85.000000% <u>2.500000%</u> <u>100.000000%</u>	1.91568%

SCHEDULE XIV
FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 31</u>						
Unknown	<u>T-31-N, R-6-W</u> Sec. 2: Lot 5	9.35	Royalty Working Interest L. A. Smith ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	00.000000% 00.000000% <u>00.000000%</u>	.000000%
<u>TRACT 32</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 3 & 4 a portion thereof designated as Tract 37	38.12	Royalty Working Interest T. H. McElvain, et al ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	00.000000% 00.000000% <u>00.000000%</u>	.000000%
Fee	<u>T-32-N, R-6-W</u> Sec. 34: NW/4SW/4	40.00	Royalty Working Interest Northwest Pipeline ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	00.000000% 00.000000% <u>00.000000%</u>	.000000%
<u>TRACT 33</u>						
SF-078765	<u>T-31-N, R-6-W</u> Sec. 4: S/2SW/4, SW/4SE/4 Sec. 5: All Sec. 8: NW/4, E/2NE/4, Sec. 9: All Sec. 10: Lots 1, 2,3, E/2E/2, NW/4 Sec. 15: Lots 1, 2, E/2SW/4, E/2	2220.23	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	00.000000% 87.500000% <u>00.000000%</u>	12.26042%
	Sec. 8: SW/4	160.00	Royalty Working Interest Northwest Pipeline Corp. Amoco ORRI Total	12.500000% 43.750000% 43.750000% 00.000000% <u>100.000000%</u>	12.500000% 43.750000% 43.750000% <u>00.000000%</u>	.44177%

SCHEDULE XIV
FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 34</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 8: W/2NE	80.00	Royalty	12.500000%	12.500000%	.44177%
			Working Interest			
			Northwest Pipeline Corp.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 35</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 10: W/2E/2	160.00	Royalty	12.500000%	12.500000%	.88354%
			Working Interest			
			Northwest Pipeline Corp.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 36</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 10: Tract 38 Sec. 15: Tract 38	161.52	Royalty	12.500000%	12.500000%	.89194%
			Working Interest			
			Northwest Pipeline Corp.	82.031250%	82.031250%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 37</u>						
SF-078771	<u>T-31-N, R-6-W</u> Sec. 11: All Sec. 14: All Sec. 23: All Sec. 26: All	2560.00	Royalty	12.500000%	12.500000%	14.13667%
			Working Interest			
			Northwest Pipeline Corp.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 38</u>						
Fee	<u>T-31-N, R-6-W</u> Sec. 15: Tract 39	80.00	Royalty	12.500000%	12.500000%	.44177%
			Working Interest			
			Northwest Pipeline Corp.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XIV
FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 39</u>						
SF-078766	<u>T-31-N, R-6-W</u> Sec. 22: E/2 Sec. 25: Lots 1,2,3,4 W/2, W/2E/2, Sec. 22: W/2	1184.48	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	6.54086%
<u>TRACT 43</u>						
E-289-31	<u>T-31-N, R-6-W</u> Sec. 15: out of S/2S/2SW/4SW/4	8.41	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 87.500000% 00.000000% <u>100.000000%</u>	12.500000% 82.500000% 5.000000% <u>100.000000%</u>	.04644%
<u>TRACT 44</u>						
E-504-11	<u>T-32-N, R-6-W</u> Sec. 32: W/2	320.00	Royalty Working Interest Northwest Pipeline Corp. ORRI Total	12.500000% 84.500000% 3.000000% <u>100.000000%</u>	12.500000% 84.500000% 3.000000% <u>100.000000%</u>	1.76708%
<u>TRACT 45</u>						
E-504-13	<u>T-31-N, R-6-W</u> Sec. 32: E/2	320.00	Royalty Working Interest El Paso Natural Gas Co. ORRI Total	12.500000% 65.625000% 21.875000% <u>100.000000%</u>	12.500000% 65.625000% 21.875000% <u>100.000000%</u>	1.76708%
<u>TRACT 46</u>						
Fee	<u>T-32-N, R-6-W</u> Sec. 34: W/2 NW/4	80.00	Royalty Working Interest Northwest Pipeline Corp. Amoco ORRI Total	12.500000% 43.750000% 43.750000% 00.000000% <u>100.000000%</u>	12.500000% 43.750000% 43.750000% 00.000000% <u>100.000000%</u>	.22089%

SCHEDULE XIV
FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

<u>SERIAL NUMBER</u>	<u>DESCRIPTION</u>	<u>NUMBER OF ACRES</u>	<u>DRILLING BLOCK OWNERSHIP</u>	<u>PERCENTAGE</u>	<u>PERCENTAGE COMMITTED</u>	<u>PRESENT ACTUAL PARTICIPATION</u>
<u>TRACT 47</u>						
E-346-19	<u>T-32-N, R-6-W</u> Sec. 36: W/2	320.00	Royalty	12.500000%	12.500000%	1.76708%
			Working Interest			
			Northwest Pipeline Corp.	87.500000%	87.500000%	
			ORRI	<u>00.000000%</u>	<u>00.000000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	
<u>TRACT 48</u>						
E-346-24	<u>T-32-N, R-6-W</u> Sec. 36: E/2	320.00	Royalty	12.500000%	12.500000%	1.76708%
			Working Interest			
			El Paso Natural Gas Co.	65.625000%	65.625000%	
			ORRI	<u>21.875000%</u>	<u>21.875000%</u>	
			Total	<u>100.000000%</u>	<u>100.000000%</u>	

SCHEDULE XIV
FOURTEENTH EXPANDED PARTICIPATING AREA FOR THE MESAVERDE FORMATION
ROSA UNIT AREA

RECAPITULATION

Description of Lands in Participating Area

Township 31 North, Range 5 West, N.M.P.M.

Sec. 33: 5/2

Sec. 5,6,7,8,18,19,20,29,30,31,32: All

Township 31 North, Range 6 West, N.M.P.M.

Sec. 8: N/2, SW/4

Sec. 1,2,*3,*4,5,9,10,11,12,13,14,15,22,23,24,25,26: All

Township 32 North, Range 6 West, N.M.P.M.

Sec. 33: W/2

Sec. 32,34,35,36: All

Total Number of Acres in Participating Area 18,196.40

Total Number of Committed Acres in Participating Area 18,108.93

*Portion of this acreage not committed to unit.